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## LAMPIRAN

### LAMPIRAN 1

*Source code pages.tsx (client)*

```
import React, { useState, useEffect } from 'react';
import math, { min, max, sum } from 'mathjs';
import Button from 'react-bootstrap/Button';
import Table from 'react-bootstrap/Table';
import DropdownButton from 'react-bootstrap/DropdownButton';
import Dropdown from 'react-bootstrap/Dropdown';
import Nav from 'react-bootstrap/Nav';
import { PieChart } from 'react-minimal-pie-chart';
import PopUp from 'reactjs-popup';
import Pdf from "react-to-pdf";
import config from './config'
import Update from './module/update';
import Engine from './module/engine';

function Pages() {

  const [ login , setLogin ] = useState(0);
  const ref = React.useRef() as React.MutableRefObject<HTMLInputElement>;

  //State From Database

  const [ indeks , setIndeks ] = useState({});
  const [ konsistensi , setKonsistensi ] = useState({});
  const [ inisialkriteria , setInKriteria ] = useState({});
  const [ inisialsubkriteria , setInSubkriteria ] = useState({});
  const [ inisialalternatif , setInAlternatif ] = useState({});
  const [ kriteria , setKriteria ] = useState({});
  const [ subkriteria , setSubkriteria ] = useState({});
  const [ alternatif , setAlternatif ] = useState({});

  //General Function

  async function reFetch() {
    try {
      const fetchIndeks = await fetch('/api/indeks');
      const fetchKonsistensi = await fetch('/api/konsistensi');
      const fetchInisialKriteria = await fetch('/api/nilaikriteria');
      const fetchInisialSubkriteria = await fetch('/api/nilaisubkriteria');
      const fetchInisialAlternatif = await fetch('/api/nilaialternatif');
      const fetchKriteria = await fetch('/api/kriteria');
      const fetchSubkriteria = await fetch('/api/subkriteria');
      const fetchAlternatif = await fetch('/api/alternatif');
      fetchIndeks.json()
        .then(refetch => setIndeks(refetch))
      fetchKonsistensi.json()
        .then(refetch => setKonsistensi(refetch))
      fetchInisialKriteria.json()
        .then(refetch => setInKriteria(refetch))
      fetchInisialSubkriteria.json()
        .then(refetch => setInSubkriteria(refetch))
      fetchInisialAlternatif.json()
        .then(refetch => setInAlternatif(refetch))
    }
  }
}
```

```

        fetchKriteria.json()
            .then(refetch => setKriteria(refetch))
        fetchSubkriteria.json()
            .then(refetch => setSubkriteria(refetch))
        fetchAlternatif.json()
            .then(refetch => setAlternatif(refetch))
            console.log('reFetched')
    } catch (error) {
        console.log(error);
    }
}

useEffect(() => {
    reFetch()
}, [] )

function HandleLogin() {
    const code = config.user + "-" + config.pass
    if ( event.target[0].value + "-" + event.target[1].value == code ) {
        setLogin(1)
    } else if ( event.target[0].value + "-" + event.target[1].value !== code ) {
        setLogin(3)
    }
}

function HandleLogout() {
    setLogin(0)
}

function Switches(n, setN){
    if (n == 0) {
        setN(1)
    } if (n ==1) {
        setN(0)
    }
}

function Comparison(name1, name2, face, value, dbname, tablename, idname, enginename,
numbername, subname) {

    const arah = "arah"
    const nilai = "nilai"
    const no = numbername
    let indeks = 1
    let errors = 0
    let nn = 1

    if ( no == I_iind01 ) { indeks = I_xind01 ; errors = I_eind01 ; nn = I_nind01 }
    if ( no == I_iind02 ) { indeks = I_xind02 ; errors = I_eind02 ; nn = I_nind02 }
    if ( no == I_iind03 ) { indeks = I_xind03 ; errors = I_eind03 ; nn = I_nind03 }
    if ( no == I_iind04 ) { indeks = I_xind04 ; errors = I_eind04 ; nn = I_nind04 }
    if ( no == I_iind05 ) { indeks = I_xind05 ; errors = I_eind05 ; nn = I_nind05 }
    if ( no == I_iind06 ) { indeks = I_xind06 ; errors = I_eind06 ; nn = I_nind06 }
    if ( no == I_iind07 ) { indeks = I_xind07 ; errors = I_eind07 ; nn = I_nind07 }
    if ( no == I_iind08 ) { indeks = I_xind08 ; errors = I_eind08 ; nn = I_nind08 }
    if ( no == I_iind09 ) { indeks = I_xind09 ; errors = I_eind09 ; nn = I_nind09 }
    if ( no == I_iind10 ) { indeks = I_xind10 ; errors = I_eind10 ; nn = I_nind10 }
    if ( no == I_iind11 ) { indeks = I_xind11 ; errors = I_eind11 ; nn = I_nind11 }
    if ( no == I_iind12 ) { indeks = I_xind12 ; errors = I_eind12 ; nn = I_nind12 }
}

```

```

if ( no == I_iind13 ) { indeks = I_xind13 ; errors = I_eind13 ; nn = I_nind13 }
if ( no == I_iind14 ) { indeks = I_xind14 ; errors = I_eind14 ; nn = I_nind14 }
if ( no == I_iind15 ) { indeks = I_xind15 ; errors = I_eind15 ; nn = I_nind15 }

const m = name1 + " = 1 dan " + name2 + " = 1"
const n = name1 + " = 3 dan " + name2 + " = 1"
const o = name1 + " = 5 dan " + name2 + " = 1"
const p = name1 + " = 7 dan " + name2 + " = 1"
const q = name1 + " = 9 dan " + name2 + " = 1"
const r = name2 + " = 3 dan " + name1 + " = 1"
const s = name2 + " = 5 dan " + name1 + " = 1"
const t = name2 + " = 7 dan " + name1 + " = 1"
const u = name2 + " = 9 dan " + name1 + " = 1"

function execute (f, v) {
  if (enginename == 1) {
    Update(dbname, tablename, arah, f, idname);
    Update(dbname, tablename, nilai, v, idname);
    console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " " +
arah + " " + f + " " + idname);
    console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " " +
nilai + " " + v + " " + idname);
    Engine(face, value, f, v, idname, 0, no, indeks, errors, 1, K_nilai,
S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
  };
  if (enginename == 2) {
    Update(dbname, tablename, arah, f, idname);
    Update(dbname, tablename, nilai, v, idname);
    console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " " +
arah + " " + f + " " + idname);
    console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " " +
nilai + " " + v + " " + idname);
    Engine(face, value, f, v, idname, subname, no, indeks, errors, 2, K_nilai,
S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
  };
  if (enginename == 3) {
    if (subname == 1) {
      Update(dbname, tablename, "arahprd1", f, idname);
      Update(dbname, tablename, "nilaiprd1", v, idname);
      console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
      console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
      Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 2) {
      Update(dbname, tablename, "arahprd2", f, idname);
      Update(dbname, tablename, "nilaiprd2", v, idname);
      console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
      console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
      Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 3) {
      Update(dbname, tablename, "arahprd3", f, idname);
      Update(dbname, tablename, "nilaiprd3", v, idname);
    }
  }
}

```

```

        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 4) {
        Update(dbname, tablename, "arahprc1", f, idname);
        Update(dbname, tablename, "nilaiprc1", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 5) {
        Update(dbname, tablename, "arahprc2", f, idname);
        Update(dbname, tablename, "nilaiprc2", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 6) {
        Update(dbname, tablename, "arahprc3", f, idname);
        Update(dbname, tablename, "nilaiprc3", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 7) {
        Update(dbname, tablename, "arahplc1", f, idname);
        Update(dbname, tablename, "nilaiplc1", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 8) {
        Update(dbname, tablename, "arahplc2", f, idname);
        Update(dbname, tablename, "nilaiplc2", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 9) {
        Update(dbname, tablename, "arahplc3", f, idname);

```

```

        Update(dbname, tablename, "nilaiplc3", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 10) {
        Update(dbname, tablename, "arahprm1", f, idname);
        Update(dbname, tablename, "nilaiprm1", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 11) {
        Update(dbname, tablename, "arahprm2", f, idname);
        Update(dbname, tablename, "nilaiprm2", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    if (subname == 12) {
        Update(dbname, tablename, "arahprm3", f, idname);
        Update(dbname, tablename, "nilaiprm3", v, idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ arah + " " + f + " " + idname);
        console.log(name1 + " " + name2 + " " + dbname + " " + tablename + " "
+ nilai + " " + v + " " + idname);
        Engine(face, value, f, v, idname, subname, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
    };
    reFetch();
}

return (
    <div color = "black">
        <DropDownButton id="dropdown-comparison" size="sm" drop="down"
title="Ganti">
            <DropDown.Item key="L1" onClick={() => execute(`'L'`,
1)}>{m}</DropDown.Item>
            <DropDown.Item key="L3" onClick={() => execute(`'L'`,
3)}>{n}</DropDown.Item>
            <DropDown.Item key="L5" onClick={() => execute(`'L'`,
5)}>{o}</DropDown.Item>
            <DropDown.Item key="L7" onClick={() => execute(`'L'`,
7)}>{p}</DropDown.Item>
            <DropDown.Item key="L9" onClick={() => execute(`'L'`,
9)}>{q}</DropDown.Item>
            <DropDown.Item key="R3" onClick={() => execute(`'R'`,
3)}>{r}</DropDown.Item>

```



```

        <Dropdown.Item key="R5" onClick={() => execute(`R`,
5)}}>{s}</Dropdown.Item>
        <Dropdown.Item key="R7" onClick={() => execute(`R`,
7)}}>{t}</Dropdown.Item>
        <Dropdown.Item key="R9" onClick={() => execute(`R`,
9)}}>{u}</Dropdown.Item>
    </DropdownButton>
</div>
);
}

function ResetValue(idname, enginename) {

    function ResetColoumn(coloumnname1, coloumnname2) {
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8001)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8002)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8003)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8004)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8005)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8006)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8007)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8008)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8009)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8010)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8011)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8012)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8013)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8014)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8015)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8016)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8017)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8018)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8019)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8020)
        Update(G_dbname, A_tname1, coloumnname1, `L`, 8021)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8001)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8002)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8003)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8004)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8005)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8006)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8007)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8008)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8009)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8010)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8011)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8012)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8013)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8014)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8015)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8016)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8017)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8018)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8019)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8020)
        Update(G_dbname, A_tname1, coloumnname2, 1, 8021)
    }

    if(idname == 6001) {

```

```

        ResetColoumn('arahprd2', 'nilaiprd2')
    }

    if(idname == 6002) {
        ResetColoumn('arahprd3', 'nilaiprd3')
    }

    if(idname == 6016) {
        ResetColoumn('arahprc2', 'nilaiprc2')
    }

    if(idname == 6017) {
        ResetColoumn('arahprc3', 'nilaiprc3')
    }

    if(idname == 6031) {
        ResetColoumn('arahplc2', 'nilaiplc2')
    }

    if(idname == 6032) {
        ResetColoumn('arahplc3', 'nilaiplc3')
    }

    if(idname == 6046) {
        ResetColoumn('arahprm2', 'nilaiprm2')
    }

    if(idname == 6047) {
        ResetColoumn('arahprm3', 'nilaiprm3')
    }

    if (enginename == 2) {
        Update(G_dbname, S_tname1, 'arah', `L`, idname)
        Update(G_dbname, S_tname1, 'nilai', 1, idname)
    }

    if (enginename == 3) {
        Update(G_dbname, A_tname1, 'arahprd1', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprd1', 1, idname)
        Update(G_dbname, A_tname1, 'arahprd2', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprd2', 1, idname)
        Update(G_dbname, A_tname1, 'arahprd3', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprd3', 1, idname)
        Update(G_dbname, A_tname1, 'arahprc1', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprc1', 1, idname)
        Update(G_dbname, A_tname1, 'arahprc2', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprc2', 1, idname)
        Update(G_dbname, A_tname1, 'arahprc3', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprc3', 1, idname)
        Update(G_dbname, A_tname1, 'arahplc1', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiplc1', 1, idname)
        Update(G_dbname, A_tname1, 'arahplc2', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiplc2', 1, idname)
        Update(G_dbname, A_tname1, 'arahplc3', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiplc3', 1, idname)
        Update(G_dbname, A_tname1, 'arahprm1', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprm1', 1, idname)
        Update(G_dbname, A_tname1, 'arahprm2', `L`, idname)
        Update(G_dbname, A_tname1, 'nilaiprm2', 1, idname)
    }

```

```

        Update(G_dbname, A_tname1, 'arahprm3', ``'L'``, idname)
        Update(G_dbname, A_tname1, 'nilaiprm3', 1, idname)
    }
}

function Rename(tablename, coloumnname, valuenam, idname) {

    const handleSubmit = (event) => {
        event.preventDefault();
        console.log(valuenam+" => "+event.target[0].value);
        Update(G_dbname, tablename, coloumnname, ``'+event.target[0].value+'``,
idname);
        reFetch();
    }

    return (
        <Popup trigger={<button className="btnsmall">Edit</button>} modal>
        {close => (
            <div className="text-center container my-3">
                <div>Edit:</div>
                <div>
                    <form onSubmit={handleSubmit} autoComplete="off">
                        <div className="container my-3"><input type="text"
name="newname" placeholder={valuenam} /></div>
                        <div>
                            <Popup trigger={<button className="btnsmall"
type="submit">Edit</button>} modal>
                            {close => (
                                <div className="text-center container my-3">
                                    <br/>
                                    <div className="container my-3"></div>
                                    <div className="container my-3">Berhasil
diubah ke {valuenam}</div>
                                    <br/>
                                    <button className="btnsmall"
onClick={close}>Keluar</button>
                                </div>
                            )}
                        </Popup>
                        <button className="btnsmall"
onClick={close}>Keluar</button>
                    </div>
                </form>
            </div>
        )}
    )
}

function ActionButtons(mode, name1, face, value, dbname, tablename, idname,
enginename, numbername, subname) {

    const stat = "status"

    const f = ``'L'``
    const v = 1

```

```

let coloumname1 = ""
let coloumname2 = ""
const coloumname1a = "subkriteria"
const coloumname1b = "alternatif"
const coloumname2a = "Subkriteria"
const coloumname2b = "Alternatif"

if ( enginename == 2 ) { coloumname1 = coloumname1a ; coloumname2 =
coloumname2a }
if ( enginename == 3 ) { coloumname1 = coloumname1b ; coloumname2 =
coloumname2b }

const konst = "konsistensi"
let id_n = 0

let no = 0
if ( mode == 1 ) { no = sum(umbername, 1) }
if ( mode == 2 ) { no = sum(umbername, -1) }

let indeks = 1
let errors = 0
let nn = 1

let diffname = 0

if ( no == I_iind01 ) { indeks = I_xind01 ; errors = I_eind01 ; nn = I_nind01 }
if ( no == I_iind02 ) { indeks = I_xind02 ; errors = I_eind02 ; nn = I_nind02 }
if ( no == I_iind03 ) { indeks = I_xind03 ; errors = I_eind03 ; nn = I_nind03 }
if ( no == I_iind04 ) { indeks = I_xind04 ; errors = I_eind04 ; nn = I_nind04 }
if ( no == I_iind05 ) { indeks = I_xind05 ; errors = I_eind05 ; nn = I_nind05 }
if ( no == I_iind06 ) { indeks = I_xind06 ; errors = I_eind06 ; nn = I_nind06 }
if ( no == I_iind07 ) { indeks = I_xind07 ; errors = I_eind07 ; nn = I_nind07 }
if ( no == I_iind08 ) { indeks = I_xind08 ; errors = I_eind08 ; nn = I_nind08 }
if ( no == I_iind09 ) { indeks = I_xind09 ; errors = I_eind09 ; nn = I_nind09 }
if ( no == I_iind10 ) { indeks = I_xind10 ; errors = I_eind10 ; nn = I_nind10 }
if ( no == I_iind11 ) { indeks = I_xind11 ; errors = I_eind11 ; nn = I_nind11 }
if ( no == I_iind12 ) { indeks = I_xind12 ; errors = I_eind12 ; nn = I_nind12 }
if ( no == I_iind13 ) { indeks = I_xind13 ; errors = I_eind13 ; nn = I_nind13 }
if ( no == I_iind14 ) { indeks = I_xind14 ; errors = I_eind14 ; nn = I_nind14 }
if ( no == I_iind15 ) { indeks = I_xind15 ; errors = I_eind15 ; nn = I_nind15 }

if ( idname >= 5001 ) { if( idname <= 5006 ) { id_n = 2002 ; subname = 1 ; face =
S_1face ; value = S_1value ; diffname = 6015 } }
if ( idname >= 5007 ) { if( idname <= 5012 ) { id_n = 2003 ; subname = 2 ; face =
S_2face ; value = S_2value ; diffname = 6030 } }
if ( idname >= 5013 ) { if( idname <= 5018 ) { id_n = 2004 ; subname = 3 ; face =
S_3face ; value = S_3value ; diffname = 6045 } }
if ( idname >= 5019 ) { if( idname <= 5024 ) { id_n = 2005 ; subname = 4 ; face =
S_4face ; value = S_4value ; diffname = 6060 } }

if ( idname >= 7001 ) { if( idname <= 7007 ) { id_n = 2006 ; diffname = 8015 } }

function Resets() {
if ( idname == 5002 ) { ResetValue(6001, 2) }
if ( idname == 5003 ) { ResetValue(6002, 2); ResetValue(6003, 2) }
if ( idname == 5008 ) { ResetValue(6016, 2) }
if ( idname == 5009 ) { ResetValue(6017, 2); ResetValue(6018, 2) }
if ( idname == 5014 ) { ResetValue(6031, 2) }
if ( idname == 5015 ) { ResetValue(6032, 2); ResetValue(6033, 2) }
}

```

```

        if ( idname == 5020 ) { ResetValue(6046, 2) }
        if ( idname == 5021 ) { ResetValue(6047, 2); ResetValue(6048, 2) }
        if ( idname == 7002 ) { ResetValue(8001, 3) }
        if ( idname == 7003 ) { ResetValue(8002, 3); ResetValue(8003, 3) }
        if ( idname == 7004 ) { ResetValue(8004, 3); ResetValue(8005, 3);
ResetValue(8006, 3) }
        if ( idname == 7005 ) { ResetValue(8007, 3); ResetValue(8008, 3);
ResetValue(8009, 3); ResetValue(8010, 3) }
        if ( idname == 7006 ) { ResetValue(8011, 3); ResetValue(8012, 3);
ResetValue(8013, 3); ResetValue(8014, 3); ResetValue(8015, 3) }
        if ( idname == 7007 ) { ResetValue(8016, 3); ResetValue(8017, 3);
ResetValue(8018, 3); ResetValue(8019, 3); ResetValue(8020, 3); ResetValue(8021, 3) }
    }

    const handleDelete = (event) => {
        event.preventDefault();
        Resets();
        Update(dbname, tablename, coloumnname1, idname, idname);
        Update(dbname, tablename, stat, 0, idname);
        Update(dbname, konst, 'n', no, id_n);
        Spin();
        reFetch();
    }

    const handleAdd = (event) => {
        event.preventDefault();
        console.log(name1+" => "+event.target[0].value);
        Update(dbname, tablename, coloumnname1, ``+event.target[0].value+``,
idname);
        Update(dbname, tablename, stat, 1, idname);
        Update(dbname, konst, 'n', no, id_n);
        Spin();
        reFetch();
    }

    function Spin() {
        if ( enginename == 2 ) {
            Engine(face, value, f, v, idname, subname, no, indeks, errors, 2, K_nilai,
S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
        }
        if ( enginename == 3 ) {
            Engine(A_11face, A_11value, f, v, idname, 1, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_12face, A_12value, f, v, idname, 2, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_13face, A_13value, f, v, idname, 3, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_21face, A_21value, f, v, idname, 4, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_22face, A_22value, f, v, idname, 5, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_23face, A_23value, f, v, idname, 6, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_31face, A_31value, f, v, idname, 7, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_32face, A_32value, f, v, idname, 8, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
            Engine(A_33face, A_33value, f, v, idname, 9, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)

```

```

        Engine(A_41face, A_41value, f, v, idname, 10, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
        Engine(A_42face, A_42value, f, v, idname, 11, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
        Engine(A_43face, A_43value, f, v, idname, 12, no, indeks, errors, 3,
K_nilai, S_nilai, A_nilaiprd, A_nilaiprc, A_nilaiplc, A_nilaiprm)
    }
}

if ( mode == 1 ) {
    return (
        <Popup trigger={<button className="btnsmall">Tambah</button>} modal>
        {close => (
            <div className="text-center container my-3">
                <div>Tambah:</div>
                <div>
                    <form onSubmit={handleAdd} autoComplete="off">
                        <div className="container my-3"><input type="text"
name="newname" placeholder={coloumnname2} /></div>
                        <div>
                            <Popup trigger={<button className="btnsmall"
type="submit">Tambah</button>} modal>
                            {close => (
                                <div className="text-center container my-3">
                                    <br/>
                                    <div className="container my-3"></div>
                                    <div className="container my-3">Berhasil
menambahkan</div>

                                    <br/>
                                    <button className="btnsmall"
onClick={close}>Keluar</button>

                                </div>
                            )}
                        </Popup>
                        <button className="btnsmall"
onClick={close}>Keluar</button>
                    </div>
                </form>
            </div>
        </div>
    )}
}

if ( mode == 2 ) {
    return(
        <Popup trigger={<button className="btnsmall">Hapus</button>} modal>
        {close => (
            <div className="text-center container my-3">
                <div className="text-center container my-3">
                    <div>Apakah Anda ingin menghapus {coloumnname1}
{name1} ?</div>
                </div>
                <div className="text-center container my-3">
                    <form onSubmit={handleDelete} autoComplete="off">
                        <Popup trigger={<button className="btnsmall"
type="submit">Hapus</button>} modal>
                        {close => (

```

```

                                <div className="text-center container my-3">
                                    <br/>
                                    <div className="container my-3"></div>
                                    <div className="container my-3">Berhasil
dihapus</div>
                                <br/>
                                <button className="btnsmall"
onClick={close}>Keluar</button>
                                </div>
                                )}
                                </Popup>
                                <button className="btnsmall"
onClick={close}>Keluar</button>
                                </form>
                                </div>
                                </div>
                                </div>
                                )}
                                </Popup>
                                )
                                }
                                }

function KriteriaPie(K_nname1, K_nname2, K_nname3, K_nname4, K_nvalue1, K_nvalue2,
K_nvalue3, K_nvalue4) {

    const K_ntitle1 = Number(K_nvalue1*100).toFixed(2)+G_percent
    const K_ntitle2 = Number(K_nvalue2*100).toFixed(2)+G_percent
    const K_ntitle3 = Number(K_nvalue3*100).toFixed(2)+G_percent
    const K_ntitle4 = Number(K_nvalue4*100).toFixed(2)+G_percent

    return (
        <div className="small text-center anim">
            <PieChart className="text-center center container my-3 anim" startAngle={-180}
labelPosition={60} label={({ dataEntry }) => dataEntry.name}
                labelStyle={{
                    fontSize: '3.6px',
                    fontFamily: 'sans-serif',
                    fill: '#DDDDDD',
                }}
                data={[
                    { title: K_ntitle1, value: K_nvalue1, name: K_nname1, color:
'#202020' },
                    { title: K_ntitle2, value: K_nvalue2, name: K_nname2, color:
'#7A7A7A' },
                    { title: K_ntitle3, value: K_nvalue3, name: K_nname3, color:
'#3E3E3E' },
                    { title: K_ntitle4, value: K_nvalue4, name: K_nname4, color:
'#5C5C5C' },
                ]}>
            </PieChart>
        </div>
    )
}

function SubkriteriaValue(S_theadn, S_nno1, S_nno2, S_nno3, S_nstat1, S_nstat2,
S_nstat3, S_nname1, S_nname2, S_nname3, S_nvalue1, S_nvalue2, S_nvalue3, S_konstnn,
S_statn, S_nn) {
    return (
        <Table className="text-center container my-3">

```

```

        <thead>
            <tr><th>{S_theadn}</th><th>{G_thead2}</th><th>{G_thead3}</th></tr>
        </thead>
        <tbody>
            { S_nstat1 == 1 ? ( <tr className="odd"
><td>{S_nname1}</td><td>{Number(S_nvalue1*100).toFixed(2)}{G_percent}</td><td>{Rename(S_tname2,S_tname1,S_nname1,S_nno1)}</td></tr> ) : ( <tr></tr> ) }
            { S_nstat2 == 1 ? ( <tr
className="even"><td>{S_nname2}</td><td>{Number(S_nvalue2*100).toFixed(2)}{G_percent}</td>
<td>{Rename(S_tname2,S_tname1,S_nname2,S_nno2)}</td></tr> ) : ( <tr></tr> ) }
            { S_nstat3 == 1 ? ( <tr className="odd"
><td>{S_nname3}</td><td>{Number(S_nvalue3*100).toFixed(2)}{G_percent}</td><td>{Rename(S_tname2,S_tname1,S_nname3,S_nno3)}</td></tr> ) : ( <tr></tr> ) }
        </tbody>
        <thead>
            <tr><th>{G_cr}{S_konstnn}{G_percent}</th><th>{S_statn == 1 ?
(<th>{G_status}{G_statusy}</th>) : (<th>{G_status}{G_statusn}</th>) }
            {
                S_nn == 3 ? ( <th><button className="btnsmall"
disabled>{G_opt3}</button>{ActionButtons(2, S_nname3, G_array0, G_array0, G_dbname,
S_tname2, S_nno3, 2, S_nn, 0)}</th> ) : (
                    S_nn == 2 ? ( <th>{ActionButtons(1, S_nname3, G_array0,
G_array0, G_dbname, S_tname2, S_nno3, 2, S_nn, 0)}{ActionButtons(2, S_nname2, G_array0,
G_array0, G_dbname, S_tname2, S_nno2, 2, S_nn, 0)}</th> ) : (
                        S_nn == 1 ? ( <th>{ActionButtons(1, S_nname2, G_array0,
G_array0, G_dbname, S_tname2, S_nno2, 2, S_nn, 0)}<button className="btnsmall"
disabled>{G_opt2}</button></th> ) : (
                            <th></th> )))
                }
            </tr>
        </thead>
    </Table>
)
}

function SubkriteriaPie(S_prdname1, S_prdname2, S_prdname3, S_prcname1, S_prcname2,
S_prcname3, S_plcname1, S_plcname2, S_plcname3, S_prmname1, S_prmname2, S_prmname3,
S_prdvalue1, S_prdvalue2, S_prdvalue3, S_prcvalue1, S_prcvalue2, S_prcvalue3, S_plcvalue1,
S_plcvalue2, S_plcvalue3, S_prmvalue1, S_prmvalue2, S_prmvalue3, S_prdn, S_prcn, S_plcn,
S_prmn) {

    let S_prdtitle1 = Number(S_prdvalue1*100).toFixed(2)+G_percent
    let S_prdtitle2 = Number(S_prdvalue2*100).toFixed(2)+G_percent
    let S_prdtitle3 = Number(S_prdvalue3*100).toFixed(2)+G_percent
    let S_prctitle1 = Number(S_prcvalue1*100).toFixed(2)+G_percent
    let S_prctitle2 = Number(S_prcvalue2*100).toFixed(2)+G_percent
    let S_prctitle3 = Number(S_prcvalue3*100).toFixed(2)+G_percent
    let S_plctitle1 = Number(S_plcvalue1*100).toFixed(2)+G_percent
    let S_plctitle2 = Number(S_plcvalue2*100).toFixed(2)+G_percent
    let S_plctitle3 = Number(S_plcvalue3*100).toFixed(2)+G_percent
    let S_prmtitle1 = Number(S_prmvalue1*100).toFixed(2)+G_percent
    let S_prmtitle2 = Number(S_prmvalue2*100).toFixed(2)+G_percent
    let S_prmtitle3 = Number(S_prmvalue3*100).toFixed(2)+G_percent

    if ( S_prdn == 2 ) { S_prdvalue3 = 0 ; S_prdtitle3 = "" ; S_prdname3 = "" }
    if ( S_prdn == 1 ) { S_prdvalue3 = 0 ; S_prdtitle3 = "" ; S_prdname3 = "" ;
S_prdvalue2 = 0 ; S_prdtitle2 = "" ; S_prdname2 = "" }
    if ( S_prcn == 2 ) { S_prcvalue3 = 0 ; S_prctitle3 = "" ; S_prcname3 = "" }

```



```

        if ( S_prcn == 1 ) { S_prcvalue3 = 0 ; S_prctitle3 = "" ; S_prcname3 = "" ;
S_prcvalue2 = 0 ; S_prctitle2 = "" ; S_prcname2 = "" }
        if ( S_plcn == 2 ) { S_plcvalue3 = 0 ; S_plctitle3 = "" ; S_plcname3 = "" }
        if ( S_plcn == 1 ) { S_plcvalue3 = 0 ; S_plctitle3 = "" ; S_plcname3 = "" ;
S_plcvalue2 = 0 ; S_plctitle2 = "" ; S_plcname2 = "" }
        if ( S_prmn == 2 ) { S_prmvalue3 = 0 ; S_prmtitle3 = "" ; S_prmname3 = "" }
        if ( S_prmn == 1 ) { S_prmvalue3 = 0 ; S_prmtitle3 = "" ; S_prmname3 = "" ;
S_prmvalue2 = 0 ; S_prmtitle2 = "" ; S_prmname2 = "" }

        return (
            <div className="small text-center">
                <PieChart className="text-center center container my-3 anim" startAngle={-
180} labelPosition={60} label={{ dataEntry }} => dataEntry.name}
                    labelStyle={{
                        fontSize: '3.6px',
                        fontFamily: 'sans-serif',
                        fill: '#DDDDDD',
                    }}
                    data={[
                        { title: S_prdtitle1, value: S_prdvalue1, name: S_prdname1, color:
'#202020' },
                        { title: S_prdtitle2, value: S_prdvalue2, name: S_prdname2, color:
'#181818' },
                        { title: S_prdtitle3, value: S_prdvalue3, name: S_prdname3, color:
'#282828' },
                        { title: S_prctitle1, value: S_prcvalue1, name: S_prcname1, color:
'#7A7A7A' },
                        { title: S_prctitle2, value: S_prcvalue2, name: S_prcname2, color:
'#727272' },
                        { title: S_prctitle3, value: S_prcvalue3, name: S_prcname3, color:
'#828282' },
                        { title: S_plctitle1, value: S_plcvalue1, name: S_plcname1, color:
'#3E3E3E' },
                        { title: S_plctitle2, value: S_plcvalue2, name: S_plcname2, color:
'#363636' },
                        { title: S_plctitle3, value: S_plcvalue3, name: S_plcname3, color:
'#464646' },
                        { title: S_prmtitle1, value: S_prmvalue1, name: S_prmname1, color:
'#5C5C5C' },
                        { title: S_prmtitle2, value: S_prmvalue2, name: S_prmname2, color:
'#545454' },
                        { title: S_prmtitle3, value: S_prmvalue3, name: S_prmname3, color:
'#646464' },
                    ]}>
                </PieChart>
            </div>
        )
    }

    function AlternatifPie(A_name1, A_name2, A_name3, A_name4, A_name5, A_name6, A_name7,
A_value1, A_value2, A_value3, A_value4, A_value5, A_value6, A_value7) {

        let A_title1 = Number(A_value1*100).toFixed(2)+G_percent
        let A_title2 = Number(A_value2*100).toFixed(2)+G_percent
        let A_title3 = Number(A_value3*100).toFixed(2)+G_percent
        let A_title4 = Number(A_value4*100).toFixed(2)+G_percent
        let A_title5 = Number(A_value5*100).toFixed(2)+G_percent
        let A_title6 = Number(A_value6*100).toFixed(2)+G_percent
        let A_title7 = Number(A_value7*100).toFixed(2)+G_percent
    }

```

```

        if ( A_n == 2 ) { A_value7 = 0 ; A_name7 = "" ; A_title7 = "" ; A_value6 = 0 ;
A_name6 = "" ; A_title6 = "" ; A_value5 = 0 ; A_name5 = "" ; A_title5 = "" ; A_value4 =
0 ; A_name4 = "" ; A_title4 = "" ; A_value3 = 0 ; A_name3 = "" ; A_title3 = "" ; }
        if ( A_n == 3 ) { A_value7 = 0 ; A_name7 = "" ; A_title7 = "" ; A_value6 = 0 ;
A_name6 = "" ; A_title6 = "" ; A_value5 = 0 ; A_name5 = "" ; A_title5 = "" ; A_value4 =
0 ; A_name4 = "" ; A_title4 = "" ; }
        if ( A_n == 4 ) { A_value7 = 0 ; A_name7 = "" ; A_title7 = "" ; A_value6 = 0 ;
A_name6 = "" ; A_title6 = "" ; A_value5 = 0 ; A_name5 = "" ; A_title5 = "" ; }
        if ( A_n == 5 ) { A_value7 = 0 ; A_name7 = "" ; A_title7 = "" ; A_value6 = 0 ;
A_name6 = "" ; A_title6 = "" ; }
        if ( A_n == 6 ) { A_value7 = 0 ; A_name7 = "" ; A_title7 = "" ; }

        return (
            <div className="small text-center">
                <PieChart className="text-center center container my-3 anim" startAngle={-
180} labelPosition={60} label={({ dataEntry }) => dataEntry.name}
                    labelStyle={{
                        fontSize: '3.6px',
                        fontFamily: 'sans-serif',
                        fill: '#DDDDDD',
                    }}
                    data={[
                        { title: A_title1, value: A_value1, name: A_name1, color:
'#111111' },
                        { title: A_title2, value: A_value2, name: A_name2, color:
'#777777' },
                        { title: A_title3, value: A_value3, name: A_name3, color:
'#222222' },
                        { title: A_title4, value: A_value4, name: A_name4, color:
'#666666' },
                        { title: A_title5, value: A_value5, name: A_name5, color:
'#333333' },
                        { title: A_title6, value: A_value6, name: A_name6, color:
'#555555' },
                        { title: A_title7, value: A_value7, name: A_name7, color:
'#444444' },
                    ]}>
                </PieChart>
            </div>
        )
    }

    //Function State Value

    const [ krits, setKrits ] = useState(0)
    const [ subs, setSubs ] = useState(1)
    const [ subss, setSubss ] = useState(0)
    const [ altss, setAltss ] = useState(0)
    const [ subsn, setSubsn ] = useState(1)

    //Rendered Function

    function KriteriaTable() {
        return(
            <Table className="text-center container my-3">
                <thead>
                    <tr><th>{K_thead1}</th><th>{G_thead2}</th></tr>

```

```

        </thead>
        <tbody>
            <tr className="odd"
><td>{K_kname1}</td><td>{Number(K_kvalue1*100).toFixed(2)}{G_percent}</td></tr>
            <tr
className="even"><td>{K_kname2}</td><td>{Number(K_kvalue2*100).toFixed(2)}{G_percent}</td>
</tr>
            <tr className="odd"
><td>{K_kname3}</td><td>{Number(K_kvalue3*100).toFixed(2)}{G_percent}</td></tr>
            <tr
className="even"><td>{K_kname4}</td><td>{Number(K_kvalue4*100).toFixed(2)}{G_percent}</td>
</tr>
        </tbody>
        <thead>
            <tr><th>{G_cr}{K_konstn}{G_percent}</th>{K_stat == 1 ?
(<th>{G_status}{G_statusy}</th>) : (<th>{G_status}{G_statusn}</th>) }</tr>
        </thead>
    </Table>
)
}

function KriteriaVisComp() {
    if (kritis == 0) {
        return (
            <div>
                {K_kno1 == 3001 ? ( KriteriaPie(K_kname1, K_kname2, K_kname3, K_kname4,
K_kvalue1, K_kvalue2, K_kvalue3, K_kvalue4) ) : ( KriteriaPie(" ", " ", " ", " ", " ", 0, 0, 0,
0) )}
            </div>
        ) } else {
        return (
            <div>
                {K_kno1 == 3001 ? (
                    <Table className="text-center container my-3 anim">
                        <tbody>
                            <tr className="odd" ><td>{K_kname1}</td>{K_fdifff12 == 'L' ?
(<td>{K_vdifff12}</td>) : (<td>1</td>)}<td>{Comparison(K_kname1, K_kname2, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff12, 1, 4, 0)}</td>{K_fdifff12 == 'L' ? (<td>1</td>) :
(<td>{K_vdifff12}</td>)}<td>{K_kname2}</td></tr>
                            <tr className="even"><td>{K_kname3}</td>{K_fdifff13 == 'R' ?
(<td>{K_vdifff13}</td>) : (<td>1</td>)}<td>{Comparison(K_kname1, K_kname3, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff13, 1, 4, 0)}</td>{K_fdifff13 == 'R' ? (<td>1</td>) :
(<td>{K_vdifff13}</td>)}<td>{K_kname1}</td></tr>
                            <tr className="odd" ><td>{K_kname2}</td>{K_fdifff23 == 'L' ?
(<td>{K_vdifff23}</td>) : (<td>1</td>)}<td>{Comparison(K_kname2, K_kname3, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff23, 1, 4, 0)}</td>{K_fdifff23 == 'L' ? (<td>1</td>) :
(<td>{K_vdifff23}</td>)}<td>{K_kname3}</td></tr>
                            <tr className="even"><td>{K_kname4}</td>{K_fdifff14 == 'R' ?
(<td>{K_vdifff14}</td>) : (<td>1</td>)}<td>{Comparison(K_kname1, K_kname4, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff14, 1, 4, 0)}</td>{K_fdifff14 == 'R' ? (<td>1</td>) :
(<td>{K_vdifff14}</td>)}<td>{K_kname1}</td></tr>
                            <tr className="odd" ><td>{K_kname2}</td>{K_fdifff24 == 'L' ?
(<td>{K_vdifff24}</td>) : (<td>1</td>)}<td>{Comparison(K_kname2, K_kname4, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff24, 1, 4, 0)}</td>{K_fdifff24 == 'L' ? (<td>1</td>) :
(<td>{K_vdifff24}</td>)}<td>{K_kname4}</td></tr>
                            <tr className="even"><td>{K_kname4}</td>{K_fdifff34 == 'R' ?
(<td>{K_vdifff34}</td>) : (<td>1</td>)}<td>{Comparison(K_kname3, K_kname4, K_kface,
K_kvalue, G_dbname, K_tname, K_idifff34, 1, 4, 0)}</td>{K_fdifff34 == 'R' ? (<td>1</td>) :
(<td>{K_vdifff34}</td>)}<td>{K_kname3}</td></tr>
                        </tbody>
                    </Table>
                ) }
            </div>
        ) }
    }
}

```

```

        </tbody>
        </Table>
        ) : ( <div></div> ) }
    </div>
    ) }
}

function SubkriteriaTitle() {
    if (subs == 1) {
        return (
            <h1 className="text-primary text-center">{"Subkriteria Product"}</h1>
        )
    } if (subs == 2) {
        return (
            <h1 className="text-primary text-center">{"Subkriteria Price"}</h1>
        )
    } if (subs == 3) {
        return (
            <h1 className="text-primary text-center">{"Subkriteria Place"}</h1>
        )
    } if (subs == 4) {
        return (
            <h1 className="text-primary text-center">{"Subkriteria Promotion"}</h1>
        )
    }
}

function SubkriteriaTable() {
    if (subs == 1) { return(SubkriteriaValue(S_thead1, S_1no1, S_1no2, S_1no3,
S_1stat1, S_1stat2, S_1stat3, S_1name1, S_1name2, S_1name3, S_1value1, S_1value2,
S_1value3, S_konstn1, S_stat1, S_n1)) }
    if (subs == 2) { return(SubkriteriaValue(S_thead2, S_2no1, S_2no2, S_2no3,
S_2stat1, S_2stat2, S_2stat3, S_2name1, S_2name2, S_2name3, S_2value1, S_2value2,
S_2value3, S_konstn2, S_stat2, S_n2)) }
    if (subs == 3) { return(SubkriteriaValue(S_thead3, S_3no1, S_3no2, S_3no3,
S_3stat1, S_3stat2, S_3stat3, S_3name1, S_3name2, S_3name3, S_3value1, S_3value2,
S_3value3, S_konstn3, S_stat3, S_n3)) }
    if (subs == 4) { return(SubkriteriaValue(S_thead4, S_4no1, S_4no2, S_4no3,
S_4stat1, S_4stat2, S_4stat3, S_4name1, S_4name2, S_4name3, S_4value1, S_4value2,
S_4value3, S_konstn4, S_stat4, S_n4)) }
}

function SubkriteriaVisComp() {
    if (subss == 0) {
        if (S_sno1 == 5001) {
            return (
                SubkriteriaPie(S_1name1, S_1name2, S_1name3, S_2name1, S_2name2,
S_2name3, S_3name1, S_3name2, S_3name3, S_4name1, S_4name2, S_4name3, S_1total1,
S_1total2, S_1total3, S_2total1, S_2total2, S_2total3, S_3total1, S_3total2, S_3total3,
S_4total1, S_4total2, S_4total3, S_n1, S_n2, S_n3, S_n4)
            )
        }
    }
    if (subss == 1) {
        return (
            <Table className="slow text-center container my-3 anim">
            <tbody>
                {S_n1 >= 2 ? ( <tr className="odd" ><td>{S_1name1}</td>{S_1fdiff12 ==
'L' ? (<td>{S_1vdiff12}</td>) : (<td>1</td>)}<td>{Comparison(S_1name1, S_1name2, S_1face,

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S_1value, G_dbname, S_tname1, S_1idiff12, 2, S_n1, 1)}</td>{S_1fdiff12 == 'L' ?
(<td>1</td>) : (<td>{S_1vdiff12}</td>)}<td>{S_1name2}</td></tr> ) : ( <tr/> )}
    {S_n1 >= 3 ? ( <tr className="odd" ><td>{S_1name3}</td>{S_1fdiff13 ==
'R' ? (<td>{S_1vdiff13}</td>) : (<td>1</td>)}<td>{Comparison(S_1name1, S_1name3, S_1face,
S_1value, G_dbname, S_tname1, S_1idiff13, 2, S_n1, 1)}</td>{S_1fdiff13 == 'R' ?
(<td>1</td>) : (<td>{S_1vdiff13}</td>)}<td>{S_1name1}</td></tr> ) : ( <tr/> )}
    {S_n1 >= 3 ? ( <tr className="odd" ><td>{S_1name2}</td>{S_1fdiff23 ==
'L' ? (<td>{S_1vdiff23}</td>) : (<td>1</td>)}<td>{Comparison(S_1name2, S_1name3, S_1face,
S_1value, G_dbname, S_tname1, S_1idiff23, 2, S_n1, 1)}</td>{S_1fdiff23 == 'L' ?
(<td>1</td>) : (<td>{S_1vdiff23}</td>)}<td>{S_1name3}</td></tr> ) : ( <tr/> )}
    {S_n2 >= 2 ? ( <tr className="odd" ><td>{S_2name1}</td>{S_2fdiff12 ==
'L' ? (<td>{S_2vdiff12}</td>) : (<td>1</td>)}<td>{Comparison(S_2name1, S_2name2, S_2face,
S_2value, G_dbname, S_tname1, S_2idiff12, 2, S_n2, 2)}</td>{S_2fdiff12 == 'L' ?
(<td>1</td>) : (<td>{S_2vdiff12}</td>)}<td>{S_2name2}</td></tr> ) : ( <tr/> )}
    {S_n2 >= 3 ? ( <tr className="odd" ><td>{S_2name3}</td>{S_2fdiff13 ==
'R' ? (<td>{S_2vdiff13}</td>) : (<td>1</td>)}<td>{Comparison(S_2name1, S_2name3, S_2face,
S_2value, G_dbname, S_tname1, S_2idiff13, 2, S_n2, 2)}</td>{S_2fdiff13 == 'R' ?
(<td>1</td>) : (<td>{S_2vdiff13}</td>)}<td>{S_2name1}</td></tr> ) : ( <tr/> )}
    {S_n2 >= 3 ? ( <tr className="odd" ><td>{S_2name2}</td>{S_2fdiff23 ==
'L' ? (<td>{S_2vdiff23}</td>) : (<td>1</td>)}<td>{Comparison(S_2name2, S_2name3, S_2face,
S_2value, G_dbname, S_tname1, S_2idiff23, 2, S_n2, 2)}</td>{S_2fdiff23 == 'L' ?
(<td>1</td>) : (<td>{S_2vdiff23}</td>)}<td>{S_2name3}</td></tr> ) : ( <tr/> )}
    {S_n3 >= 2 ? ( <tr className="odd" ><td>{S_3name1}</td>{S_3fdiff12 ==
'L' ? (<td>{S_3vdiff12}</td>) : (<td>1</td>)}<td>{Comparison(S_3name1, S_3name2, S_3face,
S_3value, G_dbname, S_tname1, S_3idiff12, 2, S_n3, 3)}</td>{S_3fdiff12 == 'L' ?
(<td>1</td>) : (<td>{S_3vdiff12}</td>)}<td>{S_3name2}</td></tr> ) : ( <tr/> )}
    {S_n3 >= 3 ? ( <tr className="odd" ><td>{S_3name3}</td>{S_3fdiff13 ==
'R' ? (<td>{S_3vdiff13}</td>) : (<td>1</td>)}<td>{Comparison(S_3name1, S_3name3, S_3face,
S_3value, G_dbname, S_tname1, S_3idiff13, 2, S_n3, 3)}</td>{S_3fdiff13 == 'R' ?
(<td>1</td>) : (<td>{S_3vdiff13}</td>)}<td>{S_3name1}</td></tr> ) : ( <tr/> )}
    {S_n3 >= 3 ? ( <tr className="odd" ><td>{S_3name2}</td>{S_3fdiff23 ==
'L' ? (<td>{S_3vdiff23}</td>) : (<td>1</td>)}<td>{Comparison(S_3name2, S_3name3, S_3face,
S_3value, G_dbname, S_tname1, S_3idiff23, 2, S_n3, 3)}</td>{S_3fdiff23 == 'L' ?
(<td>1</td>) : (<td>{S_3vdiff23}</td>)}<td>{S_3name3}</td></tr> ) : ( <tr/> )}
    {S_n4 >= 2 ? ( <tr className="odd" ><td>{S_4name1}</td>{S_4fdiff12 ==
'L' ? (<td>{S_4vdiff12}</td>) : (<td>1</td>)}<td>{Comparison(S_4name1, S_4name2, S_4face,
S_4value, G_dbname, S_tname1, S_4idiff12, 2, S_n4, 4)}</td>{S_4fdiff12 == 'L' ?
(<td>1</td>) : (<td>{S_4vdiff12}</td>)}<td>{S_4name2}</td></tr> ) : ( <tr/> )}
    {S_n4 >= 3 ? ( <tr className="odd" ><td>{S_4name3}</td>{S_4fdiff13 ==
'R' ? (<td>{S_4vdiff13}</td>) : (<td>1</td>)}<td>{Comparison(S_4name1, S_4name3, S_4face,
S_4value, G_dbname, S_tname1, S_4idiff13, 2, S_n4, 4)}</td>{S_4fdiff13 == 'R' ?
(<td>1</td>) : (<td>{S_4vdiff13}</td>)}<td>{S_4name1}</td></tr> ) : ( <tr/> )}
    {S_n4 >= 3 ? ( <tr className="odd" ><td>{S_4name2}</td>{S_4fdiff23 ==
'L' ? (<td>{S_4vdiff23}</td>) : (<td>1</td>)}<td>{Comparison(S_4name2, S_4name3, S_4face,
S_4value, G_dbname, S_tname1, S_4idiff23, 2, S_n4, 4)}</td>{S_4fdiff23 == 'L' ?
(<td>1</td>) : (<td>{S_4vdiff23}</td>)}<td>{S_4name3}</td></tr> ) : ( <tr/> )}
    </tbody>
  </Table>
)
}
}

function AlternatifTable() {
  if (A_n == 1) { return(AlternatifValue()) }
  if (A_n == 2) { return(AlternatifValue()) }
  if (A_n == 3) { return(AlternatifValue()) }
  if (A_n == 4) { return(AlternatifValue()) }
  if (A_n == 5) { return(AlternatifValue()) }
  if (A_n == 6) { return(AlternatifValue()) }
}

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    if (A_n == 7) { return(AlternatifValue()) }
}

function AlternatifValue() {

    let A_konst    = max(A_akonst)
    let A_konstn  = Number(A_konst*100).toFixed(2)
    let A_stat    = min(A_astat)

    return (
        <Table className="text-center container my-3">
            <thead>
                <tr><th>{A_name}</th><th>{G_head2}</th><th>{G_head3}</th></tr>
            </thead>
            <tbody>
                { A_astat01 == 1 ? ( <tr className="odd"
><td>{A_aname01}</td><td>{Number(A_aahp01*100).toFixed(2)}{G_percent}</td><td>{Rename(A_tname2,A_tname1,A_aname01,A_ano01)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat02 == 1 ? ( <tr
className="even"><td>{A_aname02}</td><td>{Number(A_aahp02*100).toFixed(2)}{G_percent}</td>
<td>{Rename(A_tname2,A_tname1,A_aname02,A_ano02)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat03 == 1 ? ( <tr className="odd"
><td>{A_aname03}</td><td>{Number(A_aahp03*100).toFixed(2)}{G_percent}</td><td>{Rename(A_tname2,A_tname1,A_aname03,A_ano03)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat04 == 1 ? ( <tr
className="even"><td>{A_aname04}</td><td>{Number(A_aahp04*100).toFixed(2)}{G_percent}</td>
<td>{Rename(A_tname2,A_tname1,A_aname04,A_ano04)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat05 == 1 ? ( <tr className="odd"
><td>{A_aname05}</td><td>{Number(A_aahp05*100).toFixed(2)}{G_percent}</td><td>{Rename(A_tname2,A_tname1,A_aname05,A_ano05)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat06 == 1 ? ( <tr
className="even"><td>{A_aname06}</td><td>{Number(A_aahp06*100).toFixed(2)}{G_percent}</td>
<td>{Rename(A_tname2,A_tname1,A_aname06,A_ano06)}</td></tr> ) : ( <tr></tr> ) }
                { A_astat07 == 1 ? ( <tr className="odd"
><td>{A_aname07}</td><td>{Number(A_aahp07*100).toFixed(2)}{G_percent}</td><td>{Rename(A_tname2,A_tname1,A_aname07,A_ano07)}</td></tr> ) : ( <tr></tr> ) }
            </tbody>
            <thead>
                <tr><th>{G_cr}</th><th>{A_konstn}{G_percent}</th><th>{A_stat == 1 ?
(<th>{G_status}</th>){G_status}</th> ) : ( <th>{G_status}</th> ) }
            </thead>
            {
                A_n == 7 ? ( <th><button className="btnsmall"
disabled>{G_opt3}</button>{ActionButtons(2, A_aname07, G_array0, G_array0, G_dbname,
A_tname2, A_ano07, 3, A_n, 0)}</th> ) : (
                    A_n == 6 ? ( <th>{ActionButtons(1, A_aname07, G_array0,
G_array0, G_dbname, A_tname2, A_ano07, 3, A_n, 0)}{ActionButtons(2, A_aname06, G_array0,
G_array0, G_dbname, A_tname2, A_ano06, 3, A_n, 0)}</th> ) : (
                        A_n == 5 ? ( <th>{ActionButtons(1, A_aname06, G_array0,
G_array0, G_dbname, A_tname2, A_ano06, 3, A_n, 0)}{ActionButtons(2, A_aname05, G_array0,
G_array0, G_dbname, A_tname2, A_ano05, 3, A_n, 0)}</th> ) : (
                            A_n == 4 ? ( <th>{ActionButtons(1, A_aname05, G_array0,
G_array0, G_dbname, A_tname2, A_ano05, 3, A_n, 0)}{ActionButtons(2, A_aname04, G_array0,
G_array0, G_dbname, A_tname2, A_ano04, 3, A_n, 0)}</th> ) : (
                                A_n == 3 ? ( <th>{ActionButtons(1, A_aname04, G_array0,
G_array0, G_dbname, A_tname2, A_ano04, 3, A_n, 0)}{ActionButtons(2, A_aname03, G_array0,
G_array0, G_dbname, A_tname2, A_ano03, 3, A_n, 0)}</th> ) : (
                                    A_n == 2 ? ( <th>{ActionButtons(1, A_aname03, G_array0,
G_array0, G_dbname, A_tname2, A_ano03, 3, A_n, 0)}{ActionButtons(2, A_aname02, G_array0,
G_array0, G_dbname, A_tname2, A_ano02, 3, A_n, 0)}</th> ) : (

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                A_n == 1 ? ( <th>{ActionButtons(1, A_ano02, G_array0,
G_array0, G_dbname, A_tname2, A_ano02, 3, A_n, 0)}<button className="btnsmall"
disabled>{G_opt2}</button></th> ) : (
                    <th></th> ))))))
            }
        </tr>
    </thead>
</Table>
)
}

function AlternatifComp(A_face, A_value, A_type) {
    return (
        <Table className="slow text-center container my-3 anim">
            <tbody>
                {A_n >= 2 ? ( <tr className="odd" ><td>{A_ano01}</td>{A_face[0] ==
'L' ? <td>{A_value[0]}</td> ) : <td>1</td>}<td>{Comparison(A_ano01, A_ano02,
A_face, A_value, G_dbname, A_tname1, A_idiff12, 3, A_n, A_type)}</td>{A_face[0] == 'L' ?
<td>1</td> ) : <td>{A_value[0]}</td>}<td>{A_ano02}</td></tr> ) : ( <tr/> ) }
                {A_n >= 3 ? ( <tr className="even" ><td>{A_ano03}</td>{A_face[1] ==
'R' ? <td>{A_value[1]}</td> ) : <td>1</td>}<td>{Comparison(A_ano01, A_ano03,
A_face, A_value, G_dbname, A_tname1, A_idiff13, 3, A_n, A_type)}</td>{A_face[1] == 'R' ?
<td>1</td> ) : <td>{A_value[1]}</td>}<td>{A_ano01}</td></tr> ) : ( <tr/> ) }
                {A_n >= 3 ? ( <tr className="odd" ><td>{A_ano02}</td>{A_face[2] ==
'L' ? <td>{A_value[2]}</td> ) : <td>1</td>}<td>{Comparison(A_ano02, A_ano03,
A_face, A_value, G_dbname, A_tname1, A_idiff23, 3, A_n, A_type)}</td>{A_face[2] == 'L' ?
<td>1</td> ) : <td>{A_value[2]}</td>}<td>{A_ano03}</td></tr> ) : ( <tr/> ) }
                {A_n >= 4 ? ( <tr className="even" ><td>{A_ano04}</td>{A_face[3] ==
'R' ? <td>{A_value[3]}</td> ) : <td>1</td>}<td>{Comparison(A_ano01, A_ano04,
A_face, A_value, G_dbname, A_tname1, A_idiff14, 3, A_n, A_type)}</td>{A_face[3] == 'R' ?
<td>1</td> ) : <td>{A_value[3]}</td>}<td>{A_ano01}</td></tr> ) : ( <tr/> ) }
                {A_n >= 4 ? ( <tr className="odd" ><td>{A_ano02}</td>{A_face[4] ==
'L' ? <td>{A_value[4]}</td> ) : <td>1</td>}<td>{Comparison(A_ano02, A_ano04,
A_face, A_value, G_dbname, A_tname1, A_idiff24, 3, A_n, A_type)}</td>{A_face[4] == 'L' ?
<td>1</td> ) : <td>{A_value[4]}</td>}<td>{A_ano04}</td></tr> ) : ( <tr/> ) }
                {A_n >= 4 ? ( <tr className="even" ><td>{A_ano04}</td>{A_face[5] ==
'R' ? <td>{A_value[5]}</td> ) : <td>1</td>}<td>{Comparison(A_ano03, A_ano04,
A_face, A_value, G_dbname, A_tname1, A_idiff34, 3, A_n, A_type)}</td>{A_face[5] == 'R' ?
<td>1</td> ) : <td>{A_value[5]}</td>}<td>{A_ano03}</td></tr> ) : ( <tr/> ) }
                {A_n >= 5 ? ( <tr className="odd" ><td>{A_ano01}</td>{A_face[6] ==
'L' ? <td>{A_value[6]}</td> ) : <td>1</td>}<td>{Comparison(A_ano01, A_ano05,
A_face, A_value, G_dbname, A_tname1, A_idiff15, 3, A_n, A_type)}</td>{A_face[6] == 'L' ?
<td>1</td> ) : <td>{A_value[6]}</td>}<td>{A_ano05}</td></tr> ) : ( <tr/> ) }
                {A_n >= 5 ? ( <tr className="even" ><td>{A_ano05}</td>{A_face[7] ==
'R' ? <td>{A_value[7]}</td> ) : <td>1</td>}<td>{Comparison(A_ano02, A_ano05,
A_face, A_value, G_dbname, A_tname1, A_idiff25, 3, A_n, A_type)}</td>{A_face[7] == 'R' ?
<td>1</td> ) : <td>{A_value[7]}</td>}<td>{A_ano02}</td></tr> ) : ( <tr/> ) }
                {A_n >= 5 ? ( <tr className="odd" ><td>{A_ano03}</td>{A_face[8] ==
'L' ? <td>{A_value[8]}</td> ) : <td>1</td>}<td>{Comparison(A_ano03, A_ano05,
A_face, A_value, G_dbname, A_tname1, A_idiff35, 3, A_n, A_type)}</td>{A_face[8] == 'L' ?
<td>1</td> ) : <td>{A_value[8]}</td>}<td>{A_ano05}</td></tr> ) : ( <tr/> ) }
                {A_n >= 5 ? ( <tr className="even" ><td>{A_ano05}</td>{A_face[9] ==
'R' ? <td>{A_value[9]}</td> ) : <td>1</td>}<td>{Comparison(A_ano04, A_ano05,
A_face, A_value, G_dbname, A_tname1, A_idiff45, 3, A_n, A_type)}</td>{A_face[9] == 'R' ?
<td>1</td> ) : <td>{A_value[9]}</td>}<td>{A_ano04}</td></tr> ) : ( <tr/> ) }
                {A_n >= 6 ? ( <tr className="odd" ><td>{A_ano01}</td>{A_face[10] ==
'L' ? <td>{A_value[10]}</td> ) : <td>1</td>}<td>{Comparison(A_ano01, A_ano06,
A_face, A_value, G_dbname, A_tname1, A_idiff16, 3, A_n, A_type)}</td>{A_face[10] == 'L' ?
<td>1</td> ) : <td>{A_value[10]}</td>}<td>{A_ano06}</td></tr> ) : ( <tr/> ) }
            </tbody>
        </Table>
    )
}

```

```

        {A_n >= 6 ? ( <tr className="even" > <td>{A_aname06}</td>{A_face[11] ==
'R' ? (<td>{A_value[11]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname02, A_aname06,
A_face, A_value, G_dbname, A_tname1, A_idiff26, 3, A_n, A_type)}</td>{A_face[11] == 'R' ?
(<td>1</td>) : (<td>{A_value[11]}</td>)}<td>{A_aname02}</td></tr> ) : ( <tr/> ) }
        {A_n >= 6 ? ( <tr className="odd" > <td>{A_aname03}</td>{A_face[12] ==
'L' ? (<td>{A_value[12]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname03, A_aname06,
A_face, A_value, G_dbname, A_tname1, A_idiff36, 3, A_n, A_type)}</td>{A_face[12] == 'L' ?
(<td>1</td>) : (<td>{A_value[12]}</td>)}<td>{A_aname06}</td></tr> ) : ( <tr/> ) }
        {A_n >= 6 ? ( <tr className="even" > <td>{A_aname06}</td>{A_face[13] ==
'R' ? (<td>{A_value[13]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname04, A_aname06,
A_face, A_value, G_dbname, A_tname1, A_idiff46, 3, A_n, A_type)}</td>{A_face[13] == 'R' ?
(<td>1</td>) : (<td>{A_value[13]}</td>)}<td>{A_aname04}</td></tr> ) : ( <tr/> ) }
        {A_n >= 6 ? ( <tr className="odd" > <td>{A_aname05}</td>{A_face[14] ==
'L' ? (<td>{A_value[14]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname05, A_aname06,
A_face, A_value, G_dbname, A_tname1, A_idiff56, 3, A_n, A_type)}</td>{A_face[14] == 'L' ?
(<td>1</td>) : (<td>{A_value[14]}</td>)}<td>{A_aname06}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="even" > <td>{A_aname07}</td>{A_face[15] ==
'R' ? (<td>{A_value[15]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname01, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff17, 3, A_n, A_type)}</td>{A_face[15] == 'R' ?
(<td>1</td>) : (<td>{A_value[15]}</td>)}<td>{A_aname01}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="odd" > <td>{A_aname02}</td>{A_face[16] ==
'L' ? (<td>{A_value[16]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname02, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff27, 3, A_n, A_type)}</td>{A_face[16] == 'L' ?
(<td>1</td>) : (<td>{A_value[16]}</td>)}<td>{A_aname07}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="even" > <td>{A_aname07}</td>{A_face[17] ==
'R' ? (<td>{A_value[17]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname03, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff37, 3, A_n, A_type)}</td>{A_face[17] == 'R' ?
(<td>1</td>) : (<td>{A_value[17]}</td>)}<td>{A_aname03}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="odd" > <td>{A_aname04}</td>{A_face[18] ==
'L' ? (<td>{A_value[18]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname04, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff47, 3, A_n, A_type)}</td>{A_face[18] == 'L' ?
(<td>1</td>) : (<td>{A_value[18]}</td>)}<td>{A_aname07}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="even" > <td>{A_aname07}</td>{A_face[19] ==
'R' ? (<td>{A_value[19]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname05, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff57, 3, A_n, A_type)}</td>{A_face[19] == 'R' ?
(<td>1</td>) : (<td>{A_value[19]}</td>)}<td>{A_aname05}</td></tr> ) : ( <tr/> ) }
        {A_n >= 7 ? ( <tr className="odd" > <td>{A_aname06}</td>{A_face[20] ==
'L' ? (<td>{A_value[20]}</td>) : (<td>1</td>)}<td>{Comparison(A_aname06, A_aname07,
A_face, A_value, G_dbname, A_tname1, A_idiff67, 3, A_n, A_type)}</td>{A_face[20] == 'L' ?
(<td>1</td>) : (<td>{A_value[20]}</td>)}<td>{A_aname07}</td></tr> ) : ( <tr/> ) }
    </tbody>
</Table>
)
}

function AlternatifSubs() {

    let A_konst    = 0
    let A_stat     = 0

    if ( subsn == 1 ) { A_konst = A_1konst1 ; A_stat = A_1stat1 }
    if ( subsn == 2 ) { A_konst = A_1konst2 ; A_stat = A_1stat2 }
    if ( subsn == 3 ) { A_konst = A_1konst3 ; A_stat = A_1stat3 }
    if ( subsn == 4 ) { A_konst = A_2konst1 ; A_stat = A_2stat1 }
    if ( subsn == 5 ) { A_konst = A_2konst2 ; A_stat = A_2stat2 }
    if ( subsn == 6 ) { A_konst = A_2konst3 ; A_stat = A_2stat3 }
    if ( subsn == 7 ) { A_konst = A_3konst1 ; A_stat = A_3stat1 }
    if ( subsn == 8 ) { A_konst = A_3konst2 ; A_stat = A_3stat2 }
    if ( subsn == 9 ) { A_konst = A_3konst3 ; A_stat = A_3stat3 }
}

```



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if ( subsn == 10 ) { A_konst = A_4konst1 ; A_stat = A_4stat1 }
if ( subsn == 11 ) { A_konst = A_4konst2 ; A_stat = A_4stat2 }
if ( subsn == 12 ) { A_konst = A_4konst3 ; A_stat = A_4stat3 }

let A_konstn = Number(A_konst*100).toFixed(2)

return (
  <div>
    <div className="container my-5">
      <div className="text-primary text-center"></div>
      <div className="text-center container"><Nav justify variant="pills"
defaultActiveKey="1">
        {S_n1 >= 1 ? ( <Nav.Item><Nav.Link eventKey="1" onClick={() =>
setSubsn(1) }>{S_1name1}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n1 >= 2 ? ( <Nav.Item><Nav.Link eventKey="2" onClick={() =>
setSubsn(2) }>{S_1name2}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n1 >= 3 ? ( <Nav.Item><Nav.Link eventKey="3" onClick={() =>
setSubsn(3) }>{S_1name3}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n2 >= 1 ? ( <Nav.Item><Nav.Link eventKey="4" onClick={() =>
setSubsn(4) }>{S_2name1}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n2 >= 2 ? ( <Nav.Item><Nav.Link eventKey="5" onClick={() =>
setSubsn(5) }>{S_2name2}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n2 >= 3 ? ( <Nav.Item><Nav.Link eventKey="6" onClick={() =>
setSubsn(6) }>{S_2name3}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n3 >= 1 ? ( <Nav.Item><Nav.Link eventKey="7" onClick={() =>
setSubsn(7) }>{S_3name1}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n3 >= 2 ? ( <Nav.Item><Nav.Link eventKey="8" onClick={() =>
setSubsn(8) }>{S_3name2}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n3 >= 3 ? ( <Nav.Item><Nav.Link eventKey="9" onClick={() =>
setSubsn(9) }>{S_3name3}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n4 >= 1 ? ( <Nav.Item><Nav.Link eventKey="10" onClick={() =>
setSubsn(10)}>{S_4name1}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n4 >= 2 ? ( <Nav.Item><Nav.Link eventKey="11" onClick={() =>
setSubsn(11)}>{S_4name2}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
        {S_n4 >= 3 ? ( <Nav.Item><Nav.Link eventKey="12" onClick={() =>
setSubsn(12)}>{S_4name3}</Nav.Link></Nav.Item> ) : ( <div></div> ) }
      </Nav></div>
    </div>
    <div>
      {subsn == 1 ? ( <div>{AlternatifComp(A_11face, A_11value,
1)}</div> ) : ( <div></div> ) }
      {subsn == 2 ? ( <div>{AlternatifComp(A_12face, A_12value,
2)}</div> ) : ( <div></div> ) }
      {subsn == 3 ? ( <div>{AlternatifComp(A_13face, A_13value,
3)}</div> ) : ( <div></div> ) }
      {subsn == 4 ? ( <div>{AlternatifComp(A_21face, A_21value,
4)}</div> ) : ( <div></div> ) }
      {subsn == 5 ? ( <div>{AlternatifComp(A_22face, A_22value,
5)}</div> ) : ( <div></div> ) }
      {subsn == 6 ? ( <div>{AlternatifComp(A_23face, A_23value,
6)}</div> ) : ( <div></div> ) }
      {subsn == 7 ? ( <div>{AlternatifComp(A_31face, A_31value,
7)}</div> ) : ( <div></div> ) }
      {subsn == 8 ? ( <div>{AlternatifComp(A_32face, A_32value,
8)}</div> ) : ( <div></div> ) }
      {subsn == 9 ? ( <div>{AlternatifComp(A_33face, A_33value,
9)}</div> ) : ( <div></div> ) }
      {subsn == 10 ? ( <div>{AlternatifComp(A_41face, A_41value,
10)}</div> ) : ( <div></div> ) }
    </div>
  </div>
)

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        {subsns == 11 ? ( <div>{AlternatifComp(A_42face, A_42value,
11)}</div> ) : ( <div></div> ) }
        {subsns == 12 ? ( <div>{AlternatifComp(A_43face, A_43value,
12)}</div> ) : ( <div></div> ) }
    </div>
    <Table className="text-center container my-3">
        <thead>
            <tr>
                <th>{G_cr}{A_konstn}{G_percent}</th>{A_stat == 1 ?
(<th>{G_status}{G_statusy}</th>) : (<th>{G_status}{G_statusn}</th>) }
            </tr>
        </thead>
    </Table>
</div>
)
}

function AlternatifVisComp() {
    if ( altss == 0 ) {
        if ( A_ano1 == 7001 ) {
            return (
                <div className="container my-5">
                    {AlternatifPie(A_aname01, A_aname02, A_aname03, A_aname04,
A_aname05, A_aname06, A_aname07, A_aahp01, A_aahp02, A_aahp03, A_aahp04, A_aahp05,
A_aahp06, A_aahp07)}
                </div>
            )
        }
    }

    if ( altss == 1 ) {
        return (
            <div className="container my-5">
                {AlternatifSubs()}
            </div>
        )
    }
}

function Prioritas() {

    let mess1 = "Berdasarkan hasil yang didapatkan dari perhitungan AHP di atas, "
    let mess2 = ""
    let counts = 0
    let cont = []
    const maks = Math.max(A_aahp01, A_aahp02, A_aahp03, A_aahp04, A_aahp05, A_aahp06,
A_aahp07)

    if ( A_aahp01 == maks ) { counts += 1 ; cont[cont.length] = A_aname01 }
    if ( A_aahp02 == maks ) { counts += 1 ; cont[cont.length] = A_aname02 }
    if ( A_aahp03 == maks ) { counts += 1 ; cont[cont.length] = A_aname03 }
    if ( A_aahp04 == maks ) { counts += 1 ; cont[cont.length] = A_aname04 }
    if ( A_aahp05 == maks ) { counts += 1 ; cont[cont.length] = A_aname05 }
    if ( A_aahp06 == maks ) { counts += 1 ; cont[cont.length] = A_aname06 }
    if ( A_aahp07 == maks ) { counts += 1 ; cont[cont.length] = A_aname07 }

    if ( counts == 1 ) { mess2 = cont[0]+" memiliki prioritas terbesar" }
    if ( counts == 2 ) {
        if ( A_n == 2 ) { mess2 = "tidak ada yang memiliki prioritas terbesar" }
    }
}

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        else { mess2 = cont[0]+" & "+cont[1]+" memiliki prioritas terbesar" }
    }
    if ( counts >= 3 ) { mess2 = "prioritas terbesar terbagi secara merata" }

    return (
        <div>
            <div>{mess1}</div>
            <div>{mess2}</div>
        </div>
    )
}

function Tips() {
    return(
        <Popup trigger={<Button className="btnsmall" type="submit">Tampilkan
Tips</Button>} modal>
        {close => (
            <div className="text-center container my-3">
                <br/>
                <div className="container my-3">{G_ahp1}</div>
                <div className="container my-3">{G_ahp2}</div>
                <div className="container my-3">{G_ahp3}</div>
                <div className="container my-3">{G_ahp4}</div>
                <div className="container my-3">{G_ahp5}</div>
                <div className="container my-3">{G_ahp6}</div>
                <div className="container my-3">{G_ahp7}</div>
            <br/>
            <Button className="btnsmall" onClick={close}>Keluar</Button>
        </div>
        )}
    </Popup>
    )
}

//CONST
//Login
const L_header = 'Aplikasi AHP'
const L_user = 'Username'
const L_pass = 'Password'
const L_button = 'Login'
const L_warn = 'Username dan password tidak sesuai'
const L_back = 'Kembali'
//General
const G_empty0 = ''
const G_zero0 = 0
const G_ahp1 = 'Metode AHP adalah sebuah metode penarikan kesimpulan di
mana terdapat perbandingan di dalam tiga tingkat yaitu Kriteria, Subkriteria, dan
Alternatif;'
const G_ahp2 = 'Setiap perbandingan memiliki nilai perbandingan di antara
1-9 dimana:'
const G_ahp3 = '1 berarti kedua elemen memiliki tingkat kepentingan yang
sama;'
const G_ahp4 = '3 berarti elemen pertama memiliki kepentingan sedikit lebih
dari yang kedua;'
const G_ahp5 = '5 berarti elemen pertama memiliki kepentingan yang lumayan
lebih dari yang kedua;'
const G_ahp6 = '7 berarti elemen pertama memiliki kepentingan yang sangat
banyak dari yang kedua;'

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const G_ahp7 = '9 berarti elemen pertama memiliki kepentingan yang absolut
dari yang kedua;'
const G_array0 = []
const G_thead2 = 'Perbandingan'
const G_thead3 = 'Pilihan'
const G_percent = '%'
const G_cr = 'CR : '
const G_status = 'Status : '
const G_statusy = 'Konsisten'
const G_statusn = 'Tidak Konsisten'
const G_dbname = 'ahpdatabase'
const G_opt1 = 'Edit'
const G_opt2 = 'Hapus'
const G_opt3 = 'Tambah'
//Beranda
const B_header = 'BERANDA'
const B_message = 'Selamat Datang di App AHP'
//Indeks
const I_iind01 = indeks[0] && indeks[0].id ; const I_xind01 = indeks[0]
&& indeks[0].indeks ; const I_eind01 = indeks[0] && indeks[0].error ; const
I_nind01 = indeks[0] && indeks[0].n
const I_iind02 = indeks[1] && indeks[1].id ; const I_xind02 = indeks[1]
&& indeks[1].indeks ; const I_eind02 = indeks[1] && indeks[1].error ; const
I_nind02 = indeks[1] && indeks[1].n
const I_iind03 = indeks[2] && indeks[2].id ; const I_xind03 = indeks[2]
&& indeks[2].indeks ; const I_eind03 = indeks[2] && indeks[2].error ; const
I_nind03 = indeks[2] && indeks[2].n
const I_iind04 = indeks[3] && indeks[3].id ; const I_xind04 = indeks[3]
&& indeks[3].indeks ; const I_eind04 = indeks[3] && indeks[3].error ; const
I_nind04 = indeks[3] && indeks[3].n
const I_iind05 = indeks[4] && indeks[4].id ; const I_xind05 = indeks[4]
&& indeks[4].indeks ; const I_eind05 = indeks[4] && indeks[4].error ; const
I_nind05 = indeks[4] && indeks[4].n
const I_iind06 = indeks[5] && indeks[5].id ; const I_xind06 = indeks[5]
&& indeks[5].indeks ; const I_eind06 = indeks[5] && indeks[5].error ; const
I_nind06 = indeks[5] && indeks[5].n
const I_iind07 = indeks[6] && indeks[6].id ; const I_xind07 = indeks[6]
&& indeks[6].indeks ; const I_eind07 = indeks[6] && indeks[6].error ; const
I_nind07 = indeks[6] && indeks[6].n
const I_iind08 = indeks[7] && indeks[7].id ; const I_xind08 = indeks[7]
&& indeks[7].indeks ; const I_eind08 = indeks[7] && indeks[7].error ; const
I_nind08 = indeks[7] && indeks[7].n
const I_iind09 = indeks[8] && indeks[8].id ; const I_xind09 = indeks[8]
&& indeks[8].indeks ; const I_eind09 = indeks[8] && indeks[8].error ; const
I_nind09 = indeks[8] && indeks[8].n
const I_iind10 = indeks[9] && indeks[9].id ; const I_xind10 = indeks[9]
&& indeks[9].indeks ; const I_eind10 = indeks[9] && indeks[9].error ; const
I_nind10 = indeks[9] && indeks[9].n
const I_iind11 = indeks[10] && indeks[10].id ; const I_xind11 =
indeks[10] && indeks[10].indeks ; const I_eind11 = indeks[10] && indeks[10].error ;
const I_nind11 = indeks[10] && indeks[10].n
const I_iind12 = indeks[11] && indeks[11].id ; const I_xind12 =
indeks[11] && indeks[11].indeks ; const I_eind12 = indeks[11] && indeks[11].error ;
const I_nind12 = indeks[11] && indeks[11].n
const I_iind13 = indeks[12] && indeks[12].id ; const I_xind13 =
indeks[12] && indeks[12].indeks ; const I_eind13 = indeks[12] && indeks[12].error ;
const I_nind13 = indeks[12] && indeks[12].n

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        const I_iind14 = indeks[13] && indeks[13].id ;    const I_xind14 =
indeks[13] && indeks[13].indeks ;    const I_eind14 = indeks[13] && indeks[13].error ;
const I_nind14 = indeks[13] && indeks[13].n
        const I_iind15 = indeks[14] && indeks[14].id ;    const I_xind15 =
indeks[14] && indeks[14].indeks ;    const I_eind15 = indeks[14] && indeks[14].error ;
const I_nind15 = indeks[14] && indeks[14].n
        //Kriteria
        const K_header1 = 'Kriteria'
        const K_thead1 = 'Kriteria'
        const K_tname = 'kriteria'
        const K_kno1 = inisialkriteria[0] && inisialkriteria[0].no
        const K_konst = konsistensi[0] && konsistensi[0].cr; const K_konstn =
Number(K_konst*100).toFixed(2)
        const K_stat = konsistensi[0] && konsistensi[0].status
        const K_kname1 = inisialkriteria[0] && inisialkriteria[0].kriteria ;    const
K_kvalue1 = inisialkriteria[0] && inisialkriteria[0].nilai
        const K_kname2 = inisialkriteria[1] && inisialkriteria[1].kriteria ;    const
K_kvalue2 = inisialkriteria[1] && inisialkriteria[1].nilai
        const K_kname3 = inisialkriteria[2] && inisialkriteria[2].kriteria ;    const
K_kvalue3 = inisialkriteria[2] && inisialkriteria[2].nilai
        const K_kname4 = inisialkriteria[3] && inisialkriteria[3].kriteria ;    const
K_kvalue4 = inisialkriteria[3] && inisialkriteria[3].nilai
        const K_idiff12 = kriteria[0] && kriteria[0].no ;    const K_fdiff12 =
kriteria[0] && kriteria[0].arah ;    const K_vdiff12 = kriteria[0] && kriteria[0].nilai
        const K_idiff13 = kriteria[1] && kriteria[1].no ;    const K_fdiff13 =
kriteria[1] && kriteria[1].arah ;    const K_vdiff13 = kriteria[1] && kriteria[1].nilai
        const K_idiff23 = kriteria[2] && kriteria[2].no ;    const K_fdiff23 =
kriteria[2] && kriteria[2].arah ;    const K_vdiff23 = kriteria[2] && kriteria[2].nilai
        const K_idiff14 = kriteria[3] && kriteria[3].no ;    const K_fdiff14 =
kriteria[3] && kriteria[3].arah ;    const K_vdiff14 = kriteria[3] && kriteria[3].nilai
        const K_idiff24 = kriteria[4] && kriteria[4].no ;    const K_fdiff24 =
kriteria[4] && kriteria[4].arah ;    const K_vdiff24 = kriteria[4] && kriteria[4].nilai
        const K_idiff34 = kriteria[5] && kriteria[5].no ;    const K_fdiff34 =
kriteria[5] && kriteria[5].arah ;    const K_vdiff34 = kriteria[5] && kriteria[5].nilai
        const K_nilai = [K_kvalue1, K_kvalue2, K_kvalue3, K_kvalue4]
        const K_kface = [K_fdiff12, K_fdiff13, K_fdiff23, K_fdiff14, K_fdiff24,
K_fdiff34]
        const K_kvalue = [K_vdiff12, K_vdiff13, K_vdiff23, K_vdiff14, K_vdiff24,
K_vdiff34]
        //Subkriteria
        const S_tname1 = "subkriteria"
        const S_tname2 = "nilaisubkriteria"
        const S_thead1 = "Subkriteria Product"
        const S_thead2 = "Subkriteria Price"
        const S_thead3 = "Subkriteria Place"
        const S_thead4 = "Subkriteria Promotion"
        const S_sno1 = inisialsubkriteria[0] && inisialsubkriteria[0].no
        const S_konst1 = konsistensi[1] && konsistensi[1].cr ;    const S_konstn1 =
Number(S_konst1*100).toFixed(2) ;    const S_stat1 = konsistensi[1] &&
konsistensi[1].status ;    const S_n1 = konsistensi[1] && konsistensi[1].n
        const S_konst2 = konsistensi[2] && konsistensi[2].cr ;    const S_konstn2 =
Number(S_konst2*100).toFixed(2) ;    const S_stat2 = konsistensi[2] &&
konsistensi[2].status ;    const S_n2 = konsistensi[2] && konsistensi[2].n
        const S_konst3 = konsistensi[3] && konsistensi[3].cr ;    const S_konstn3 =
Number(S_konst3*100).toFixed(2) ;    const S_stat3 = konsistensi[3] &&
konsistensi[3].status ;    const S_n3 = konsistensi[3] && konsistensi[3].n
        const S_konst4 = konsistensi[4] && konsistensi[4].cr ;    const S_konstn4 =
Number(S_konst4*100).toFixed(2) ;    const S_stat4 = konsistensi[4] &&
konsistensi[4].status ;    const S_n4 = konsistensi[4] && konsistensi[4].n

```



```

= inisialsubkriteria[20] && inisialsubkriteria[20].nilai ;    const S_4total3 =
inisialsubkriteria[20] && inisialsubkriteria[20].nilaikriteria
    const S_1diff12 = subkriteria[0] && subkriteria[0].no ;    const
S_1fdiff12 = subkriteria[0] && subkriteria[0].arah ;    const S_1vdiff12 =
subkriteria[0] && subkriteria[0].nilai
    const S_1diff13 = subkriteria[1] && subkriteria[1].no ;    const
S_1fdiff13 = subkriteria[1] && subkriteria[1].arah ;    const S_1vdiff13 =
subkriteria[1] && subkriteria[1].nilai
    const S_1diff23 = subkriteria[2] && subkriteria[2].no ;    const
S_1fdiff23 = subkriteria[2] && subkriteria[2].arah ;    const S_1vdiff23 =
subkriteria[2] && subkriteria[2].nilai
    const S_2diff12 = subkriteria[15] && subkriteria[15].no ;    const
S_2fdiff12 = subkriteria[15] && subkriteria[15].arah ;    const S_2vdiff12 =
subkriteria[15] && subkriteria[15].nilai
    const S_2diff13 = subkriteria[16] && subkriteria[16].no ;    const
S_2fdiff13 = subkriteria[16] && subkriteria[16].arah ;    const S_2vdiff13 =
subkriteria[16] && subkriteria[16].nilai
    const S_2diff23 = subkriteria[17] && subkriteria[17].no ;    const
S_2fdiff23 = subkriteria[17] && subkriteria[17].arah ;    const S_2vdiff23 =
subkriteria[17] && subkriteria[17].nilai
    const S_3diff12 = subkriteria[30] && subkriteria[30].no ;    const
S_3fdiff12 = subkriteria[30] && subkriteria[30].arah ;    const S_3vdiff12 =
subkriteria[30] && subkriteria[30].nilai
    const S_3diff13 = subkriteria[31] && subkriteria[31].no ;    const
S_3fdiff13 = subkriteria[31] && subkriteria[31].arah ;    const S_3vdiff13 =
subkriteria[31] && subkriteria[31].nilai
    const S_3diff23 = subkriteria[32] && subkriteria[32].no ;    const
S_3fdiff23 = subkriteria[32] && subkriteria[32].arah ;    const S_3vdiff23 =
subkriteria[32] && subkriteria[32].nilai
    const S_4diff12 = subkriteria[45] && subkriteria[45].no ;    const
S_4fdiff12 = subkriteria[45] && subkriteria[45].arah ;    const S_4vdiff12 =
subkriteria[45] && subkriteria[45].nilai
    const S_4diff13 = subkriteria[46] && subkriteria[46].no ;    const
S_4fdiff13 = subkriteria[46] && subkriteria[46].arah ;    const S_4vdiff13 =
subkriteria[46] && subkriteria[46].nilai
    const S_4diff23 = subkriteria[47] && subkriteria[47].no ;    const
S_4fdiff23 = subkriteria[47] && subkriteria[47].arah ;    const S_4vdiff23 =
subkriteria[47] && subkriteria[47].nilai
const S_nilai = [S_1value1, S_1value2, S_1value3, S_2value1, S_2value2,
S_2value3, S_3value1, S_3value2, S_3value3, S_4value1, S_4value2, S_4value3]
    const S_1face = [S_1fdiff12, S_1fdiff13, S_1fdiff23]
    const S_2face = [S_2fdiff12, S_2fdiff13, S_2fdiff23]
    const S_3face = [S_3fdiff12, S_3fdiff13, S_3fdiff23]
    const S_4face = [S_4fdiff12, S_4fdiff13, S_4fdiff23]
    const S_1value = [S_1vdiff12, S_1vdiff13, S_1vdiff23]
    const S_2value = [S_2vdiff12, S_2vdiff13, S_2vdiff23]
    const S_3value = [S_3vdiff12, S_3vdiff13, S_3vdiff23]
    const S_4value = [S_4vdiff12, S_4vdiff13, S_4vdiff23]
//Alternatif
    const A_header = "Alternatif"
    const A_tname1 = "alternatif"
    const A_tname2 = "nilaialternatif"
    const A_ano1 = inisialalternatif[0] && inisialalternatif[0].no
    const A_n = konsistensi[5] && konsistensi[5].n
    const A_1konst1 = konsistensi[5] && konsistensi[5].cr ;    const A_1stat1
= konsistensi[5] && konsistensi[5].status
    const A_1konst2 = konsistensi[6] && konsistensi[6].cr ;    const A_1stat2
= konsistensi[6] && konsistensi[6].status

```

```

const A_1konst3 = konsistensi[7] && konsistensi[7].cr ;      const A_1stat3
= konsistensi[7] && konsistensi[7].status
const A_2konst1 = konsistensi[8] && konsistensi[8].cr ;      const A_2stat1
= konsistensi[8] && konsistensi[8].status
const A_2konst2 = konsistensi[9] && konsistensi[9].cr ;      const A_2stat2
= konsistensi[9] && konsistensi[9].status
const A_2konst3 = konsistensi[10] && konsistensi[10].cr ;    const A_2stat3
= konsistensi[10] && konsistensi[10].status
const A_3konst1 = konsistensi[11] && konsistensi[11].cr ;    const A_3stat1
= konsistensi[11] && konsistensi[11].status
const A_3konst2 = konsistensi[12] && konsistensi[12].cr ;    const A_3stat2
= konsistensi[12] && konsistensi[12].status
const A_3konst3 = konsistensi[13] && konsistensi[13].cr ;    const A_3stat3
= konsistensi[13] && konsistensi[13].status
const A_4konst1 = konsistensi[14] && konsistensi[14].cr ;    const A_4stat1
= konsistensi[14] && konsistensi[14].status
const A_4konst2 = konsistensi[15] && konsistensi[15].cr ;    const A_4stat2
= konsistensi[15] && konsistensi[15].status
const A_4konst3 = konsistensi[16] && konsistensi[16].cr ;    const A_4stat3
= konsistensi[16] && konsistensi[16].status
const A_ano01 = [A_1konst1, A_1konst2, A_1konst3, A_2konst1, A_2konst2,
A_2konst3, A_3konst1, A_3konst2, A_3konst3, A_4konst1, A_4konst2, A_4konst3]
const A_ano02 = [A_1stat1, A_1stat2, A_1stat3, A_2stat1, A_2stat2,
A_2stat3, A_3stat1, A_3stat2, A_3stat3, A_4stat1, A_4stat2, A_4stat3]
const A_ano01 = inisialalternatif[0] && inisialalternatif[0].no ; const
A_ano02 = inisialalternatif[0] && inisialalternatif[0].alternatif ; const A_ano03
= inisialalternatif[0] && inisialalternatif[0].status ; const A_ano04 =
inisialalternatif[0] && inisialalternatif[0].ahp
const A_ano01 = inisialalternatif[1] && inisialalternatif[1].no ; const
A_ano02 = inisialalternatif[1] && inisialalternatif[1].alternatif ; const A_ano03
= inisialalternatif[1] && inisialalternatif[1].status ; const A_ano04 =
inisialalternatif[1] && inisialalternatif[1].ahp
const A_ano01 = inisialalternatif[2] && inisialalternatif[2].no ; const
A_ano02 = inisialalternatif[2] && inisialalternatif[2].alternatif ; const A_ano03
= inisialalternatif[2] && inisialalternatif[2].status ; const A_ano04 =
inisialalternatif[2] && inisialalternatif[2].ahp
const A_ano01 = inisialalternatif[3] && inisialalternatif[3].no ; const
A_ano02 = inisialalternatif[3] && inisialalternatif[3].alternatif ; const A_ano03
= inisialalternatif[3] && inisialalternatif[3].status ; const A_ano04 =
inisialalternatif[3] && inisialalternatif[3].ahp
const A_ano01 = inisialalternatif[4] && inisialalternatif[4].no ; const
A_ano02 = inisialalternatif[4] && inisialalternatif[4].alternatif ; const A_ano03
= inisialalternatif[4] && inisialalternatif[4].status ; const A_ano04 =
inisialalternatif[4] && inisialalternatif[4].ahp
const A_ano01 = inisialalternatif[5] && inisialalternatif[5].no ; const
A_ano02 = inisialalternatif[5] && inisialalternatif[5].alternatif ; const A_ano03
= inisialalternatif[5] && inisialalternatif[5].status ; const A_ano04 =
inisialalternatif[5] && inisialalternatif[5].ahp
const A_ano01 = inisialalternatif[6] && inisialalternatif[6].no ; const
A_ano02 = inisialalternatif[6] && inisialalternatif[6].alternatif ; const A_ano03
= inisialalternatif[6] && inisialalternatif[6].status ; const A_ano04 =
inisialalternatif[6] && inisialalternatif[6].ahp
const A_k01 = "Product"
const A_1prd01 = inisialalternatif[0] && inisialalternatif[0].prd1
const A_1prd02 = inisialalternatif[1] && inisialalternatif[1].prd1
const A_1prd03 = inisialalternatif[2] && inisialalternatif[2].prd1
const A_1prd04 = inisialalternatif[3] && inisialalternatif[3].prd1
const A_1prd05 = inisialalternatif[4] && inisialalternatif[4].prd1
const A_1prd06 = inisialalternatif[5] && inisialalternatif[5].prd1

```





```

const A_k04      = "Promotion"
const A_1prm01  = inisialalternatif[0] && inisialalternatif[0].prm1
const A_1prm02  = inisialalternatif[1] && inisialalternatif[1].prm1
const A_1prm03  = inisialalternatif[2] && inisialalternatif[2].prm1
const A_1prm04  = inisialalternatif[3] && inisialalternatif[3].prm1
const A_1prm05  = inisialalternatif[4] && inisialalternatif[4].prm1
const A_1prm06  = inisialalternatif[5] && inisialalternatif[5].prm1
const A_1prm07  = inisialalternatif[6] && inisialalternatif[6].prm1
const A_2prm01  = inisialalternatif[0] && inisialalternatif[0].prm2
const A_2prm02  = inisialalternatif[1] && inisialalternatif[1].prm2
const A_2prm03  = inisialalternatif[2] && inisialalternatif[2].prm2
const A_2prm04  = inisialalternatif[3] && inisialalternatif[3].prm2
const A_2prm05  = inisialalternatif[4] && inisialalternatif[4].prm2
const A_2prm06  = inisialalternatif[5] && inisialalternatif[5].prm2
const A_2prm07  = inisialalternatif[6] && inisialalternatif[6].prm2
const A_3prm01  = inisialalternatif[0] && inisialalternatif[0].prm3
const A_3prm02  = inisialalternatif[1] && inisialalternatif[1].prm3
const A_3prm03  = inisialalternatif[2] && inisialalternatif[2].prm3
const A_3prm04  = inisialalternatif[3] && inisialalternatif[3].prm3
const A_3prm05  = inisialalternatif[4] && inisialalternatif[4].prm3
const A_3prm06  = inisialalternatif[5] && inisialalternatif[5].prm3
const A_3prm07  = inisialalternatif[6] && inisialalternatif[6].prm3
//-----
const A_nilaiprd = [A_1prd01, A_1prd02, A_1prd03, A_1prd04, A_1prd05,
A_1prd06, A_1prd07, A_2prd01, A_2prd02, A_2prd03, A_2prd04, A_2prd05, A_2prd06, A_2prd07,
A_3prd01, A_3prd02, A_3prd03, A_3prd04, A_3prd05, A_3prd06, A_3prd07]
const A_nilaiprc = [A_1prc01, A_1prc02, A_1prc03, A_1prc04, A_1prc05,
A_1prc06, A_1prc07, A_2prc01, A_2prc02, A_2prc03, A_2prc04, A_2prc05, A_2prc06, A_2prc07,
A_3prc01, A_3prc02, A_3prc03, A_3prc04, A_3prc05, A_3prc06, A_3prc07]
const A_nilaiplc = [A_1plc01, A_1plc02, A_1plc03, A_1plc04, A_1plc05,
A_1plc06, A_1plc07, A_2plc01, A_2plc02, A_2plc03, A_2plc04, A_2plc05, A_2plc06, A_2plc07,
A_3plc01, A_3plc02, A_3plc03, A_3plc04, A_3plc05, A_3plc06, A_3plc07]
const A_nilaiprm = [A_1prm01, A_1prm02, A_1prm03, A_1prm04, A_1prm05,
A_1prm06, A_1prm07, A_2prm01, A_2prm02, A_2prm03, A_2prm04, A_2prm05, A_2prm06, A_2prm07,
A_3prm01, A_3prm02, A_3prm03, A_3prm04, A_3prm05, A_3prm06, A_3prm07]
const A_name     = "Alternatif"
const A_idiff12  = alternatif[0] && alternatif[0].no
const A_idiff13  = alternatif[1] && alternatif[1].no
const A_idiff23  = alternatif[2] && alternatif[2].no
const A_idiff14  = alternatif[3] && alternatif[3].no
const A_idiff24  = alternatif[4] && alternatif[4].no
const A_idiff34  = alternatif[5] && alternatif[5].no
const A_idiff15  = alternatif[6] && alternatif[6].no
const A_idiff25  = alternatif[7] && alternatif[7].no
const A_idiff35  = alternatif[8] && alternatif[8].no
const A_idiff45  = alternatif[9] && alternatif[9].no
const A_idiff16  = alternatif[10] && alternatif[10].no
const A_idiff26  = alternatif[11] && alternatif[11].no
const A_idiff36  = alternatif[12] && alternatif[12].no
const A_idiff46  = alternatif[13] && alternatif[13].no
const A_idiff56  = alternatif[14] && alternatif[14].no
const A_idiff17  = alternatif[15] && alternatif[15].no
const A_idiff27  = alternatif[16] && alternatif[16].no
const A_idiff37  = alternatif[17] && alternatif[17].no
const A_idiff47  = alternatif[18] && alternatif[18].no
const A_idiff57  = alternatif[19] && alternatif[19].no
const A_idiff67  = alternatif[20] && alternatif[20].no

```

```

//-----
const A_11fdiff12
= alternatif[0] && alternatif[0].arahprd1 ;      const A_11vdiff12
= alternatif[0] && alternatif[0].nilaiprd1
const A_11fdiff13
= alternatif[1] && alternatif[1].arahprd1 ;      const A_11vdiff13
= alternatif[1] && alternatif[1].nilaiprd1
const A_11fdiff23
= alternatif[2] && alternatif[2].arahprd1 ;      const A_11vdiff23
= alternatif[2] && alternatif[2].nilaiprd1
const A_11fdiff14
= alternatif[3] && alternatif[3].arahprd1 ;      const A_11vdiff14
= alternatif[3] && alternatif[3].nilaiprd1
const A_11fdiff24
= alternatif[4] && alternatif[4].arahprd1 ;      const A_11vdiff24
= alternatif[4] && alternatif[4].nilaiprd1
const A_11fdiff34
= alternatif[5] && alternatif[5].arahprd1 ;      const A_11vdiff34
= alternatif[5] && alternatif[5].nilaiprd1
const A_11fdiff15
= alternatif[6] && alternatif[6].arahprd1 ;      const A_11vdiff15
= alternatif[6] && alternatif[6].nilaiprd1
const A_11fdiff25
= alternatif[7] && alternatif[7].arahprd1 ;      const A_11vdiff25
= alternatif[7] && alternatif[7].nilaiprd1
const A_11fdiff35
= alternatif[8] && alternatif[8].arahprd1 ;      const A_11vdiff35
= alternatif[8] && alternatif[8].nilaiprd1
const A_11fdiff45
= alternatif[9] && alternatif[9].arahprd1 ;      const A_11vdiff45
= alternatif[9] && alternatif[9].nilaiprd1
const A_11fdiff16
= alternatif[10] && alternatif[10].arahprd1 ;    const A_11vdiff16
= alternatif[10] && alternatif[10].nilaiprd1
const A_11fdiff26
= alternatif[11] && alternatif[11].arahprd1 ;    const A_11vdiff26
= alternatif[11] && alternatif[11].nilaiprd1
const A_11fdiff36
= alternatif[12] && alternatif[12].arahprd1 ;    const A_11vdiff36
= alternatif[12] && alternatif[12].nilaiprd1
const A_11fdiff46
= alternatif[13] && alternatif[13].arahprd1 ;    const A_11vdiff46
= alternatif[13] && alternatif[13].nilaiprd1
const A_11fdiff56
= alternatif[14] && alternatif[14].arahprd1 ;    const A_11vdiff56
= alternatif[14] && alternatif[14].nilaiprd1
const A_11fdiff17
= alternatif[15] && alternatif[15].arahprd1 ;    const A_11vdiff17
= alternatif[15] && alternatif[15].nilaiprd1
const A_11fdiff27
= alternatif[16] && alternatif[16].arahprd1 ;    const A_11vdiff27
= alternatif[16] && alternatif[16].nilaiprd1
const A_11fdiff37
= alternatif[17] && alternatif[17].arahprd1 ;    const A_11vdiff37
= alternatif[17] && alternatif[17].nilaiprd1
const A_11fdiff47
= alternatif[18] && alternatif[18].arahprd1 ;    const A_11vdiff47
= alternatif[18] && alternatif[18].nilaiprd1

```

```

const A_11fdiff57
= alternatif[19] && alternatif[19].arahprd1 ; const A_11vdiff57
= alternatif[19] && alternatif[19].nilaiprd1
const A_11fdiff67
= alternatif[20] && alternatif[20].arahprd1 ; const A_11vdiff67
= alternatif[20] && alternatif[20].nilaiprd1
const A_11face = [A_11fdiff12, A_11fdiff13, A_11fdiff23, A_11fdiff14,
A_11fdiff24, A_11fdiff34, A_11fdiff15, A_11fdiff25, A_11fdiff35, A_11fdiff45, A_11fdiff16,
A_11fdiff26, A_11fdiff36, A_11fdiff46, A_11fdiff56, A_11fdiff17, A_11fdiff27, A_11fdiff37,
A_11fdiff47, A_11fdiff57, A_11fdiff67]
const A_11value = [A_11vdiff12, A_11vdiff13, A_11vdiff23, A_11vdiff14,
A_11vdiff24, A_11vdiff34, A_11vdiff15, A_11vdiff25, A_11vdiff35, A_11vdiff45, A_11vdiff16,
A_11vdiff26, A_11vdiff36, A_11vdiff46, A_11vdiff56, A_11vdiff17, A_11vdiff27, A_11vdiff37,
A_11vdiff47, A_11vdiff57, A_11vdiff67]
const A_12fdiff12
= alternatif[0] && alternatif[0].arahprd2 ; const A_12vdiff12
= alternatif[0] && alternatif[0].nilaiprd2
const A_12fdiff13
= alternatif[1] && alternatif[1].arahprd2 ; const A_12vdiff13
= alternatif[1] && alternatif[1].nilaiprd2
const A_12fdiff23
= alternatif[2] && alternatif[2].arahprd2 ; const A_12vdiff23
= alternatif[2] && alternatif[2].nilaiprd2
const A_12fdiff14
= alternatif[3] && alternatif[3].arahprd2 ; const A_12vdiff14
= alternatif[3] && alternatif[3].nilaiprd2
const A_12fdiff24
= alternatif[4] && alternatif[4].arahprd2 ; const A_12vdiff24
= alternatif[4] && alternatif[4].nilaiprd2
const A_12fdiff34
= alternatif[5] && alternatif[5].arahprd2 ; const A_12vdiff34
= alternatif[5] && alternatif[5].nilaiprd2
const A_12fdiff15
= alternatif[6] && alternatif[6].arahprd2 ; const A_12vdiff15
= alternatif[6] && alternatif[6].nilaiprd2
const A_12fdiff25
= alternatif[7] && alternatif[7].arahprd2 ; const A_12vdiff25
= alternatif[7] && alternatif[7].nilaiprd2
const A_12fdiff35
= alternatif[8] && alternatif[8].arahprd2 ; const A_12vdiff35
= alternatif[8] && alternatif[8].nilaiprd2
const A_12fdiff45
= alternatif[9] && alternatif[9].arahprd2 ; const A_12vdiff45
= alternatif[9] && alternatif[9].nilaiprd2
const A_12fdiff16
= alternatif[10] && alternatif[10].arahprd2 ; const A_12vdiff16
= alternatif[10] && alternatif[10].nilaiprd2
const A_12fdiff26
= alternatif[11] && alternatif[11].arahprd2 ; const A_12vdiff26
= alternatif[11] && alternatif[11].nilaiprd2
const A_12fdiff36
= alternatif[12] && alternatif[12].arahprd2 ; const A_12vdiff36
= alternatif[12] && alternatif[12].nilaiprd2
const A_12fdiff46
= alternatif[13] && alternatif[13].arahprd2 ; const A_12vdiff46
= alternatif[13] && alternatif[13].nilaiprd2
const A_12fdiff56
= alternatif[14] && alternatif[14].arahprd2 ; const A_12vdiff56
= alternatif[14] && alternatif[14].nilaiprd2

```

```

const A_12fdiff17
= alternatif[15] && alternatif[15].arahprd2 ; const A_12vdiff17
= alternatif[15] && alternatif[15].nilaiprd2
const A_12fdiff27
= alternatif[16] && alternatif[16].arahprd2 ; const A_12vdiff27
= alternatif[16] && alternatif[16].nilaiprd2
const A_12fdiff37
= alternatif[17] && alternatif[17].arahprd2 ; const A_12vdiff37
= alternatif[17] && alternatif[17].nilaiprd2
const A_12fdiff47
= alternatif[18] && alternatif[18].arahprd2 ; const A_12vdiff47
= alternatif[18] && alternatif[18].nilaiprd2
const A_12fdiff57
= alternatif[19] && alternatif[19].arahprd2 ; const A_12vdiff57
= alternatif[19] && alternatif[19].nilaiprd2
const A_12fdiff67
= alternatif[20] && alternatif[20].arahprd2 ; const A_12vdiff67
= alternatif[20] && alternatif[20].nilaiprd2
const A_12face = [A_12fdiff12, A_12fdiff13, A_12fdiff23, A_12fdiff14,
A_12fdiff24, A_12fdiff34, A_12fdiff15, A_12fdiff25, A_12fdiff35, A_12fdiff45, A_12fdiff16,
A_12fdiff26, A_12fdiff36, A_12fdiff46, A_12fdiff56, A_12fdiff17, A_12fdiff27, A_12fdiff37,
A_12fdiff47, A_12fdiff57, A_12fdiff67]
const A_12value = [A_12vdiff12, A_12vdiff13, A_12vdiff23, A_12vdiff14,
A_12vdiff24, A_12vdiff34, A_12vdiff15, A_12vdiff25, A_12vdiff35, A_12vdiff45, A_12vdiff16,
A_12vdiff26, A_12vdiff36, A_12vdiff46, A_12vdiff56, A_12vdiff17, A_12vdiff27, A_12vdiff37,
A_12vdiff47, A_12vdiff57, A_12vdiff67]
const A_13fdiff12
= alternatif[0] && alternatif[0].arahprd3 ; const A_13vdiff12
= alternatif[0] && alternatif[0].nilaiprd3
const A_13fdiff13
= alternatif[1] && alternatif[1].arahprd3 ; const A_13vdiff13
= alternatif[1] && alternatif[1].nilaiprd3
const A_13fdiff23
= alternatif[2] && alternatif[2].arahprd3 ; const A_13vdiff23
= alternatif[2] && alternatif[2].nilaiprd3
const A_13fdiff14
= alternatif[3] && alternatif[3].arahprd3 ; const A_13vdiff14
= alternatif[3] && alternatif[3].nilaiprd3
const A_13fdiff24
= alternatif[4] && alternatif[4].arahprd3 ; const A_13vdiff24
= alternatif[4] && alternatif[4].nilaiprd3
const A_13fdiff34
= alternatif[5] && alternatif[5].arahprd3 ; const A_13vdiff34
= alternatif[5] && alternatif[5].nilaiprd3
const A_13fdiff15
= alternatif[6] && alternatif[6].arahprd3 ; const A_13vdiff15
= alternatif[6] && alternatif[6].nilaiprd3
const A_13fdiff25
= alternatif[7] && alternatif[7].arahprd3 ; const A_13vdiff25
= alternatif[7] && alternatif[7].nilaiprd3
const A_13fdiff35
= alternatif[8] && alternatif[8].arahprd3 ; const A_13vdiff35
= alternatif[8] && alternatif[8].nilaiprd3
const A_13fdiff45
= alternatif[9] && alternatif[9].arahprd3 ; const A_13vdiff45
= alternatif[9] && alternatif[9].nilaiprd3
const A_13fdiff16
= alternatif[10] && alternatif[10].arahprd3 ; const A_13vdiff16
= alternatif[10] && alternatif[10].nilaiprd3

```

```

const A_13fdiff26
= alternatif[11] && alternatif[11].arahprd3 ; const A_13vdiff26
= alternatif[11] && alternatif[11].nilaiprd3
const A_13fdiff36
= alternatif[12] && alternatif[12].arahprd3 ; const A_13vdiff36
= alternatif[12] && alternatif[12].nilaiprd3
const A_13fdiff46
= alternatif[13] && alternatif[13].arahprd3 ; const A_13vdiff46
= alternatif[13] && alternatif[13].nilaiprd3
const A_13fdiff56
= alternatif[14] && alternatif[14].arahprd3 ; const A_13vdiff56
= alternatif[14] && alternatif[14].nilaiprd3
const A_13fdiff17
= alternatif[15] && alternatif[15].arahprd3 ; const A_13vdiff17
= alternatif[15] && alternatif[15].nilaiprd3
const A_13fdiff27
= alternatif[16] && alternatif[16].arahprd3 ; const A_13vdiff27
= alternatif[16] && alternatif[16].nilaiprd3
const A_13fdiff37
= alternatif[17] && alternatif[17].arahprd3 ; const A_13vdiff37
= alternatif[17] && alternatif[17].nilaiprd3
const A_13fdiff47
= alternatif[18] && alternatif[18].arahprd3 ; const A_13vdiff47
= alternatif[18] && alternatif[18].nilaiprd3
const A_13fdiff57
= alternatif[19] && alternatif[19].arahprd3 ; const A_13vdiff57
= alternatif[19] && alternatif[19].nilaiprd3
const A_13fdiff67
= alternatif[20] && alternatif[20].arahprd3 ; const A_13vdiff67
= alternatif[20] && alternatif[20].nilaiprd3
const A_13face = [A_13fdiff12, A_13fdiff13, A_13fdiff23, A_13fdiff14,
A_13fdiff24, A_13fdiff34, A_13fdiff15, A_13fdiff25, A_13fdiff35, A_13fdiff45, A_13fdiff16,
A_13fdiff26, A_13fdiff36, A_13fdiff46, A_13fdiff56, A_13fdiff17, A_13fdiff27, A_13fdiff37,
A_13fdiff47, A_13fdiff57, A_13fdiff67]
const A_13value = [A_13vdiff12, A_13vdiff13, A_13vdiff23, A_13vdiff14,
A_13vdiff24, A_13vdiff34, A_13vdiff15, A_13vdiff25, A_13vdiff35, A_13vdiff45, A_13vdiff16,
A_13vdiff26, A_13vdiff36, A_13vdiff46, A_13vdiff56, A_13vdiff17, A_13vdiff27, A_13vdiff37,
A_13vdiff47, A_13vdiff57, A_13vdiff67]
const A_21fdiff12
= alternatif[0] && alternatif[0].arahprc1 ; const A_21vdiff12
= alternatif[0] && alternatif[0].nilaiprc1
const A_21fdiff13
= alternatif[1] && alternatif[1].arahprc1 ; const A_21vdiff13
= alternatif[1] && alternatif[1].nilaiprc1
const A_21fdiff23
= alternatif[2] && alternatif[2].arahprc1 ; const A_21vdiff23
= alternatif[2] && alternatif[2].nilaiprc1
const A_21fdiff14
= alternatif[3] && alternatif[3].arahprc1 ; const A_21vdiff14
= alternatif[3] && alternatif[3].nilaiprc1
const A_21fdiff24
= alternatif[4] && alternatif[4].arahprc1 ; const A_21vdiff24
= alternatif[4] && alternatif[4].nilaiprc1
const A_21fdiff34
= alternatif[5] && alternatif[5].arahprc1 ; const A_21vdiff34
= alternatif[5] && alternatif[5].nilaiprc1
const A_21fdiff15
= alternatif[6] && alternatif[6].arahprc1 ; const A_21vdiff15
= alternatif[6] && alternatif[6].nilaiprc1

```

```

const A_21fdiff25
= alternatif[7] && alternatif[7].arahprc1 ;      const A_21vdiff25
= alternatif[7] && alternatif[7].nilaiprc1
const A_21fdiff35
= alternatif[8] && alternatif[8].arahprc1 ;      const A_21vdiff35
= alternatif[8] && alternatif[8].nilaiprc1
const A_21fdiff45
= alternatif[9] && alternatif[9].arahprc1 ;      const A_21vdiff45
= alternatif[9] && alternatif[9].nilaiprc1
const A_21fdiff16
= alternatif[10] && alternatif[10].arahprc1 ;    const A_21vdiff16
= alternatif[10] && alternatif[10].nilaiprc1
const A_21fdiff26
= alternatif[11] && alternatif[11].arahprc1 ;    const A_21vdiff26
= alternatif[11] && alternatif[11].nilaiprc1
const A_21fdiff36
= alternatif[12] && alternatif[12].arahprc1 ;    const A_21vdiff36
= alternatif[12] && alternatif[12].nilaiprc1
const A_21fdiff46
= alternatif[13] && alternatif[13].arahprc1 ;    const A_21vdiff46
= alternatif[13] && alternatif[13].nilaiprc1
const A_21fdiff56
= alternatif[14] && alternatif[14].arahprc1 ;    const A_21vdiff56
= alternatif[14] && alternatif[14].nilaiprc1
const A_21fdiff17
= alternatif[15] && alternatif[15].arahprc1 ;    const A_21vdiff17
= alternatif[15] && alternatif[15].nilaiprc1
const A_21fdiff27
= alternatif[16] && alternatif[16].arahprc1 ;    const A_21vdiff27
= alternatif[16] && alternatif[16].nilaiprc1
const A_21fdiff37
= alternatif[17] && alternatif[17].arahprc1 ;    const A_21vdiff37
= alternatif[17] && alternatif[17].nilaiprc1
const A_21fdiff47
= alternatif[18] && alternatif[18].arahprc1 ;    const A_21vdiff47
= alternatif[18] && alternatif[18].nilaiprc1
const A_21fdiff57
= alternatif[19] && alternatif[19].arahprc1 ;    const A_21vdiff57
= alternatif[19] && alternatif[19].nilaiprc1
const A_21fdiff67
= alternatif[20] && alternatif[20].arahprc1 ;    const A_21vdiff67
= alternatif[20] && alternatif[20].nilaiprc1
const A_21face = [A_21fdiff12, A_21fdiff13, A_21fdiff23, A_21fdiff14,
A_21fdiff24, A_21fdiff34, A_21fdiff15, A_21fdiff25, A_21fdiff35, A_21fdiff45, A_21fdiff16,
A_21fdiff26, A_21fdiff36, A_21fdiff46, A_21fdiff56, A_21fdiff17, A_21fdiff27, A_21fdiff37,
A_21fdiff47, A_21fdiff57, A_21fdiff67]
const A_21value = [A_21vdiff12, A_21vdiff13, A_21vdiff23, A_21vdiff14,
A_21vdiff24, A_21vdiff34, A_21vdiff15, A_21vdiff25, A_21vdiff35, A_21vdiff45, A_21vdiff16,
A_21vdiff26, A_21vdiff36, A_21vdiff46, A_21vdiff56, A_21vdiff17, A_21vdiff27, A_21vdiff37,
A_21vdiff47, A_21vdiff57, A_21vdiff67]
const A_22fdiff12
= alternatif[0] && alternatif[0].arahprc2 ;      const A_22vdiff12
= alternatif[0] && alternatif[0].nilaiprc2
const A_22fdiff13
= alternatif[1] && alternatif[1].arahprc2 ;      const A_22vdiff13
= alternatif[1] && alternatif[1].nilaiprc2
const A_22fdiff23
= alternatif[2] && alternatif[2].arahprc2 ;      const A_22vdiff23
= alternatif[2] && alternatif[2].nilaiprc2

```

```

const A_22fdiff14
= alternatif[3] && alternatif[3].arahprc2 ;      const A_22vdiff14
= alternatif[3] && alternatif[3].nilaiprc2
const A_22fdiff24
= alternatif[4] && alternatif[4].arahprc2 ;      const A_22vdiff24
= alternatif[4] && alternatif[4].nilaiprc2
const A_22fdiff34
= alternatif[5] && alternatif[5].arahprc2 ;      const A_22vdiff34
= alternatif[5] && alternatif[5].nilaiprc2
const A_22fdiff15
= alternatif[6] && alternatif[6].arahprc2 ;      const A_22vdiff15
= alternatif[6] && alternatif[6].nilaiprc2
const A_22fdiff25
= alternatif[7] && alternatif[7].arahprc2 ;      const A_22vdiff25
= alternatif[7] && alternatif[7].nilaiprc2
const A_22fdiff35
= alternatif[8] && alternatif[8].arahprc2 ;      const A_22vdiff35
= alternatif[8] && alternatif[8].nilaiprc2
const A_22fdiff45
= alternatif[9] && alternatif[9].arahprc2 ;      const A_22vdiff45
= alternatif[9] && alternatif[9].nilaiprc2
const A_22fdiff16
= alternatif[10] && alternatif[10].arahprc2 ;     const A_22vdiff16
= alternatif[10] && alternatif[10].nilaiprc2
const A_22fdiff26
= alternatif[11] && alternatif[11].arahprc2 ;     const A_22vdiff26
= alternatif[11] && alternatif[11].nilaiprc2
const A_22fdiff36
= alternatif[12] && alternatif[12].arahprc2 ;     const A_22vdiff36
= alternatif[12] && alternatif[12].nilaiprc2
const A_22fdiff46
= alternatif[13] && alternatif[13].arahprc2 ;     const A_22vdiff46
= alternatif[13] && alternatif[13].nilaiprc2
const A_22fdiff56
= alternatif[14] && alternatif[14].arahprc2 ;     const A_22vdiff56
= alternatif[14] && alternatif[14].nilaiprc2
const A_22fdiff17
= alternatif[15] && alternatif[15].arahprc2 ;     const A_22vdiff17
= alternatif[15] && alternatif[15].nilaiprc2
const A_22fdiff27
= alternatif[16] && alternatif[16].arahprc2 ;     const A_22vdiff27
= alternatif[16] && alternatif[16].nilaiprc2
const A_22fdiff37
= alternatif[17] && alternatif[17].arahprc2 ;     const A_22vdiff37
= alternatif[17] && alternatif[17].nilaiprc2
const A_22fdiff47
= alternatif[18] && alternatif[18].arahprc2 ;     const A_22vdiff47
= alternatif[18] && alternatif[18].nilaiprc2
const A_22fdiff57
= alternatif[19] && alternatif[19].arahprc2 ;     const A_22vdiff57
= alternatif[19] && alternatif[19].nilaiprc2
const A_22fdiff67
= alternatif[20] && alternatif[20].arahprc2 ;     const A_22vdiff67
= alternatif[20] && alternatif[20].nilaiprc2
const A_22face = [A_22fdiff12, A_22fdiff13, A_22fdiff23, A_22fdiff14,
A_22fdiff24, A_22fdiff34, A_22fdiff15, A_22fdiff25, A_22fdiff35, A_22fdiff45, A_22fdiff16,
A_22fdiff26, A_22fdiff36, A_22fdiff46, A_22fdiff56, A_22fdiff17, A_22fdiff27, A_22fdiff37,
A_22fdiff47, A_22fdiff57, A_22fdiff67]

```



```

const A_22value = [A_22vdiff12, A_22vdiff13, A_22vdiff23, A_22vdiff14,
A_22vdiff24, A_22vdiff34, A_22vdiff15, A_22vdiff25, A_22vdiff35, A_22vdiff45, A_22vdiff16,
A_22vdiff26, A_22vdiff36, A_22vdiff46, A_22vdiff56, A_22vdiff17, A_22vdiff27, A_22vdiff37,
A_22vdiff47, A_22vdiff57, A_22vdiff67]
const A_23fdiff12
= alternatif[0] && alternatif[0].arahprc3 ; const A_23vdiff12
= alternatif[0] && alternatif[0].nilaiprc3
const A_23fdiff13
= alternatif[1] && alternatif[1].arahprc3 ; const A_23vdiff13
= alternatif[1] && alternatif[1].nilaiprc3
const A_23fdiff23
= alternatif[2] && alternatif[2].arahprc3 ; const A_23vdiff23
= alternatif[2] && alternatif[2].nilaiprc3
const A_23fdiff14
= alternatif[3] && alternatif[3].arahprc3 ; const A_23vdiff14
= alternatif[3] && alternatif[3].nilaiprc3
const A_23fdiff24
= alternatif[4] && alternatif[4].arahprc3 ; const A_23vdiff24
= alternatif[4] && alternatif[4].nilaiprc3
const A_23fdiff34
= alternatif[5] && alternatif[5].arahprc3 ; const A_23vdiff34
= alternatif[5] && alternatif[5].nilaiprc3
const A_23fdiff15
= alternatif[6] && alternatif[6].arahprc3 ; const A_23vdiff15
= alternatif[6] && alternatif[6].nilaiprc3
const A_23fdiff25
= alternatif[7] && alternatif[7].arahprc3 ; const A_23vdiff25
= alternatif[7] && alternatif[7].nilaiprc3
const A_23fdiff35
= alternatif[8] && alternatif[8].arahprc3 ; const A_23vdiff35
= alternatif[8] && alternatif[8].nilaiprc3
const A_23fdiff45
= alternatif[9] && alternatif[9].arahprc3 ; const A_23vdiff45
= alternatif[9] && alternatif[9].nilaiprc3
const A_23fdiff16
= alternatif[10] && alternatif[10].arahprc3 ; const A_23vdiff16
= alternatif[10] && alternatif[10].nilaiprc3
const A_23fdiff26
= alternatif[11] && alternatif[11].arahprc3 ; const A_23vdiff26
= alternatif[11] && alternatif[11].nilaiprc3
const A_23fdiff36
= alternatif[12] && alternatif[12].arahprc3 ; const A_23vdiff36
= alternatif[12] && alternatif[12].nilaiprc3
const A_23fdiff46
= alternatif[13] && alternatif[13].arahprc3 ; const A_23vdiff46
= alternatif[13] && alternatif[13].nilaiprc3
const A_23fdiff56
= alternatif[14] && alternatif[14].arahprc3 ; const A_23vdiff56
= alternatif[14] && alternatif[14].nilaiprc3
const A_23fdiff17
= alternatif[15] && alternatif[15].arahprc3 ; const A_23vdiff17
= alternatif[15] && alternatif[15].nilaiprc3
const A_23fdiff27
= alternatif[16] && alternatif[16].arahprc3 ; const A_23vdiff27
= alternatif[16] && alternatif[16].nilaiprc3
const A_23fdiff37
= alternatif[17] && alternatif[17].arahprc3 ; const A_23vdiff37
= alternatif[17] && alternatif[17].nilaiprc3

```

```

const A_23fdiff47
= alternatif[18] && alternatif[18].arahprc3 ; const A_23vdiff47
= alternatif[18] && alternatif[18].nilaiprc3
const A_23fdiff57
= alternatif[19] && alternatif[19].arahprc3 ; const A_23vdiff57
= alternatif[19] && alternatif[19].nilaiprc3
const A_23fdiff67
= alternatif[20] && alternatif[20].arahprc3 ; const A_23vdiff67
= alternatif[20] && alternatif[20].nilaiprc3
const A_23face = [A_23fdiff12, A_23fdiff13, A_23fdiff23, A_23fdiff14,
A_23fdiff24, A_23fdiff34, A_23fdiff15, A_23fdiff25, A_23fdiff35, A_23fdiff45, A_23fdiff16,
A_23fdiff26, A_23fdiff36, A_23fdiff46, A_23fdiff56, A_23fdiff17, A_23fdiff27, A_23fdiff37,
A_23fdiff47, A_23fdiff57, A_23fdiff67]
const A_23value = [A_23vdiff12, A_23vdiff13, A_23vdiff23, A_23vdiff14,
A_23vdiff24, A_23vdiff34, A_23vdiff15, A_23vdiff25, A_23vdiff35, A_23vdiff45, A_23vdiff16,
A_23vdiff26, A_23vdiff36, A_23vdiff46, A_23vdiff56, A_23vdiff17, A_23vdiff27, A_23vdiff37,
A_23vdiff47, A_23vdiff57, A_23vdiff67]
const A_31fdiff12
= alternatif[0] && alternatif[0].arahplc1 ; const A_31vdiff12
= alternatif[0] && alternatif[0].nilaiplc1
const A_31fdiff13
= alternatif[1] && alternatif[1].arahplc1 ; const A_31vdiff13
= alternatif[1] && alternatif[1].nilaiplc1
const A_31fdiff23
= alternatif[2] && alternatif[2].arahplc1 ; const A_31vdiff23
= alternatif[2] && alternatif[2].nilaiplc1
const A_31fdiff14
= alternatif[3] && alternatif[3].arahplc1 ; const A_31vdiff14
= alternatif[3] && alternatif[3].nilaiplc1
const A_31fdiff24
= alternatif[4] && alternatif[4].arahplc1 ; const A_31vdiff24
= alternatif[4] && alternatif[4].nilaiplc1
const A_31fdiff34
= alternatif[5] && alternatif[5].arahplc1 ; const A_31vdiff34
= alternatif[5] && alternatif[5].nilaiplc1
const A_31fdiff15
= alternatif[6] && alternatif[6].arahplc1 ; const A_31vdiff15
= alternatif[6] && alternatif[6].nilaiplc1
const A_31fdiff25
= alternatif[7] && alternatif[7].arahplc1 ; const A_31vdiff25
= alternatif[7] && alternatif[7].nilaiplc1
const A_31fdiff35
= alternatif[8] && alternatif[8].arahplc1 ; const A_31vdiff35
= alternatif[8] && alternatif[8].nilaiplc1
const A_31fdiff45
= alternatif[9] && alternatif[9].arahplc1 ; const A_31vdiff45
= alternatif[9] && alternatif[9].nilaiplc1
const A_31fdiff16
= alternatif[10] && alternatif[10].arahplc1 ; const A_31vdiff16
= alternatif[10] && alternatif[10].nilaiplc1
const A_31fdiff26
= alternatif[11] && alternatif[11].arahplc1 ; const A_31vdiff26
= alternatif[11] && alternatif[11].nilaiplc1
const A_31fdiff36
= alternatif[12] && alternatif[12].arahplc1 ; const A_31vdiff36
= alternatif[12] && alternatif[12].nilaiplc1
const A_31fdiff46
= alternatif[13] && alternatif[13].arahplc1 ; const A_31vdiff46
= alternatif[13] && alternatif[13].nilaiplc1

```

```

const A_31fdiff56
= alternatif[14] && alternatif[14].arahplc1 ; const A_31vdiff56
= alternatif[14] && alternatif[14].nilaiplc1
const A_31fdiff17
= alternatif[15] && alternatif[15].arahplc1 ; const A_31vdiff17
= alternatif[15] && alternatif[15].nilaiplc1
const A_31fdiff27
= alternatif[16] && alternatif[16].arahplc1 ; const A_31vdiff27
= alternatif[16] && alternatif[16].nilaiplc1
const A_31fdiff37
= alternatif[17] && alternatif[17].arahplc1 ; const A_31vdiff37
= alternatif[17] && alternatif[17].nilaiplc1
const A_31fdiff47
= alternatif[18] && alternatif[18].arahplc1 ; const A_31vdiff47
= alternatif[18] && alternatif[18].nilaiplc1
const A_31fdiff57
= alternatif[19] && alternatif[19].arahplc1 ; const A_31vdiff57
= alternatif[19] && alternatif[19].nilaiplc1
const A_31fdiff67
= alternatif[20] && alternatif[20].arahplc1 ; const A_31vdiff67
= alternatif[20] && alternatif[20].nilaiplc1
const A_31face = [A_31fdiff12, A_31fdiff13, A_31fdiff23, A_31fdiff14,
A_31fdiff24, A_31fdiff34, A_31fdiff15, A_31fdiff25, A_31fdiff35, A_31fdiff45, A_31fdiff16,
A_31fdiff26, A_31fdiff36, A_31fdiff46, A_31fdiff56, A_31fdiff17, A_31fdiff27, A_31fdiff37,
A_31fdiff47, A_31fdiff57, A_31fdiff67]
const A_31value = [A_31vdiff12, A_31vdiff13, A_31vdiff23, A_31vdiff14,
A_31vdiff24, A_31vdiff34, A_31vdiff15, A_31vdiff25, A_31vdiff35, A_31vdiff45, A_31vdiff16,
A_31vdiff26, A_31vdiff36, A_31vdiff46, A_31vdiff56, A_31vdiff17, A_31vdiff27, A_31vdiff37,
A_31vdiff47, A_31vdiff57, A_31vdiff67]
const A_32fdiff12
= alternatif[0] && alternatif[0].arahplc2 ; const A_32vdiff12
= alternatif[0] && alternatif[0].nilaiplc2
const A_32fdiff13
= alternatif[1] && alternatif[1].arahplc2 ; const A_32vdiff13
= alternatif[1] && alternatif[1].nilaiplc2
const A_32fdiff23
= alternatif[2] && alternatif[2].arahplc2 ; const A_32vdiff23
= alternatif[2] && alternatif[2].nilaiplc2
const A_32fdiff14
= alternatif[3] && alternatif[3].arahplc2 ; const A_32vdiff14
= alternatif[3] && alternatif[3].nilaiplc2
const A_32fdiff24
= alternatif[4] && alternatif[4].arahplc2 ; const A_32vdiff24
= alternatif[4] && alternatif[4].nilaiplc2
const A_32fdiff34
= alternatif[5] && alternatif[5].arahplc2 ; const A_32vdiff34
= alternatif[5] && alternatif[5].nilaiplc2
const A_32fdiff15
= alternatif[6] && alternatif[6].arahplc2 ; const A_32vdiff15
= alternatif[6] && alternatif[6].nilaiplc2
const A_32fdiff25
= alternatif[7] && alternatif[7].arahplc2 ; const A_32vdiff25
= alternatif[7] && alternatif[7].nilaiplc2
const A_32fdiff35
= alternatif[8] && alternatif[8].arahplc2 ; const A_32vdiff35
= alternatif[8] && alternatif[8].nilaiplc2
const A_32fdiff45
= alternatif[9] && alternatif[9].arahplc2 ; const A_32vdiff45
= alternatif[9] && alternatif[9].nilaiplc2

```

```

const A_32fdiff16
= alternatif[10] && alternatif[10].arahplc2 ; const A_32vdiff16
= alternatif[10] && alternatif[10].nilaiplc2
const A_32fdiff26
= alternatif[11] && alternatif[11].arahplc2 ; const A_32vdiff26
= alternatif[11] && alternatif[11].nilaiplc2
const A_32fdiff36
= alternatif[12] && alternatif[12].arahplc2 ; const A_32vdiff36
= alternatif[12] && alternatif[12].nilaiplc2
const A_32fdiff46
= alternatif[13] && alternatif[13].arahplc2 ; const A_32vdiff46
= alternatif[13] && alternatif[13].nilaiplc2
const A_32fdiff56
= alternatif[14] && alternatif[14].arahplc2 ; const A_32vdiff56
= alternatif[14] && alternatif[14].nilaiplc2
const A_32fdiff17
= alternatif[15] && alternatif[15].arahplc2 ; const A_32vdiff17
= alternatif[15] && alternatif[15].nilaiplc2
const A_32fdiff27
= alternatif[16] && alternatif[16].arahplc2 ; const A_32vdiff27
= alternatif[16] && alternatif[16].nilaiplc2
const A_32fdiff37
= alternatif[17] && alternatif[17].arahplc2 ; const A_32vdiff37
= alternatif[17] && alternatif[17].nilaiplc2
const A_32fdiff47
= alternatif[18] && alternatif[18].arahplc2 ; const A_32vdiff47
= alternatif[18] && alternatif[18].nilaiplc2
const A_32fdiff57
= alternatif[19] && alternatif[19].arahplc2 ; const A_32vdiff57
= alternatif[19] && alternatif[19].nilaiplc2
const A_32fdiff67
= alternatif[20] && alternatif[20].arahplc2 ; const A_32vdiff67
= alternatif[20] && alternatif[20].nilaiplc2
const A_32face = [A_32fdiff12, A_32fdiff13, A_32fdiff23, A_32fdiff14,
A_32fdiff24, A_32fdiff34, A_32fdiff15, A_32fdiff25, A_32fdiff35, A_32fdiff45, A_32fdiff16,
A_32fdiff26, A_32fdiff36, A_32fdiff46, A_32fdiff56, A_32fdiff17, A_32fdiff27, A_32fdiff37,
A_32fdiff47, A_32fdiff57, A_32fdiff67]
const A_32value = [A_32vdiff12, A_32vdiff13, A_32vdiff23, A_32vdiff14,
A_32vdiff24, A_32vdiff34, A_32vdiff15, A_32vdiff25, A_32vdiff35, A_32vdiff45, A_32vdiff16,
A_32vdiff26, A_32vdiff36, A_32vdiff46, A_32vdiff56, A_32vdiff17, A_32vdiff27, A_32vdiff37,
A_32vdiff47, A_32vdiff57, A_32vdiff67]
const A_33fdiff12
= alternatif[0] && alternatif[0].arahplc3 ; const A_33vdiff12
= alternatif[0] && alternatif[0].nilaiplc3
const A_33fdiff13
= alternatif[1] && alternatif[1].arahplc3 ; const A_33vdiff13
= alternatif[1] && alternatif[1].nilaiplc3
const A_33fdiff23
= alternatif[2] && alternatif[2].arahplc3 ; const A_33vdiff23
= alternatif[2] && alternatif[2].nilaiplc3
const A_33fdiff14
= alternatif[3] && alternatif[3].arahplc3 ; const A_33vdiff14
= alternatif[3] && alternatif[3].nilaiplc3
const A_33fdiff24
= alternatif[4] && alternatif[4].arahplc3 ; const A_33vdiff24
= alternatif[4] && alternatif[4].nilaiplc3
const A_33fdiff34
= alternatif[5] && alternatif[5].arahplc3 ; const A_33vdiff34
= alternatif[5] && alternatif[5].nilaiplc3

```

```

const A_33fdiff15
= alternatif[6] && alternatif[6].arahplc3 ;      const A_33vdiff15
= alternatif[6] && alternatif[6].nilaiplc3
const A_33fdiff25
= alternatif[7] && alternatif[7].arahplc3 ;      const A_33vdiff25
= alternatif[7] && alternatif[7].nilaiplc3
const A_33fdiff35
= alternatif[8] && alternatif[8].arahplc3 ;      const A_33vdiff35
= alternatif[8] && alternatif[8].nilaiplc3
const A_33fdiff45
= alternatif[9] && alternatif[9].arahplc3 ;      const A_33vdiff45
= alternatif[9] && alternatif[9].nilaiplc3
const A_33fdiff16
= alternatif[10] && alternatif[10].arahplc3 ;    const A_33vdiff16
= alternatif[10] && alternatif[10].nilaiplc3
const A_33fdiff26
= alternatif[11] && alternatif[11].arahplc3 ;    const A_33vdiff26
= alternatif[11] && alternatif[11].nilaiplc3
const A_33fdiff36
= alternatif[12] && alternatif[12].arahplc3 ;    const A_33vdiff36
= alternatif[12] && alternatif[12].nilaiplc3
const A_33fdiff46
= alternatif[13] && alternatif[13].arahplc3 ;    const A_33vdiff46
= alternatif[13] && alternatif[13].nilaiplc3
const A_33fdiff56
= alternatif[14] && alternatif[14].arahplc3 ;    const A_33vdiff56
= alternatif[14] && alternatif[14].nilaiplc3
const A_33fdiff17
= alternatif[15] && alternatif[15].arahplc3 ;    const A_33vdiff17
= alternatif[15] && alternatif[15].nilaiplc3
const A_33fdiff27
= alternatif[16] && alternatif[16].arahplc3 ;    const A_33vdiff27
= alternatif[16] && alternatif[16].nilaiplc3
const A_33fdiff37
= alternatif[17] && alternatif[17].arahplc3 ;    const A_33vdiff37
= alternatif[17] && alternatif[17].nilaiplc3
const A_33fdiff47
= alternatif[18] && alternatif[18].arahplc3 ;    const A_33vdiff47
= alternatif[18] && alternatif[18].nilaiplc3
const A_33fdiff57
= alternatif[19] && alternatif[19].arahplc3 ;    const A_33vdiff57
= alternatif[19] && alternatif[19].nilaiplc3
const A_33fdiff67
= alternatif[20] && alternatif[20].arahplc3 ;    const A_33vdiff67
= alternatif[20] && alternatif[20].nilaiplc3
const A_33face = [A_33fdiff12, A_33fdiff13, A_33fdiff23, A_33fdiff14,
A_33fdiff24, A_33fdiff34, A_33fdiff15, A_33fdiff25, A_33fdiff35, A_33fdiff45, A_33fdiff16,
A_33fdiff26, A_33fdiff36, A_33fdiff46, A_33fdiff56, A_33fdiff17, A_33fdiff27, A_33fdiff37,
A_33fdiff47, A_33fdiff57, A_33fdiff67]
const A_33value = [A_33vdiff12, A_33vdiff13, A_33vdiff23, A_33vdiff14,
A_33vdiff24, A_33vdiff34, A_33vdiff15, A_33vdiff25, A_33vdiff35, A_33vdiff45, A_33vdiff16,
A_33vdiff26, A_33vdiff36, A_33vdiff46, A_33vdiff56, A_33vdiff17, A_33vdiff27, A_33vdiff37,
A_33vdiff47, A_33vdiff57, A_33vdiff67]
const A_41fdiff12
= alternatif[0] && alternatif[0].arahprm1 ;      const A_41vdiff12
= alternatif[0] && alternatif[0].nilaiprm1
const A_41fdiff13
= alternatif[1] && alternatif[1].arahprm1 ;      const A_41vdiff13
= alternatif[1] && alternatif[1].nilaiprm1

```

```

const A_41fdiff23
= alternatif[2] && alternatif[2].arahprm1 ; const A_41vdiff23
= alternatif[2] && alternatif[2].nilaiprm1
const A_41fdiff14
= alternatif[3] && alternatif[3].arahprm1 ; const A_41vdiff14
= alternatif[3] && alternatif[3].nilaiprm1
const A_41fdiff24
= alternatif[4] && alternatif[4].arahprm1 ; const A_41vdiff24
= alternatif[4] && alternatif[4].nilaiprm1
const A_41fdiff34
= alternatif[5] && alternatif[5].arahprm1 ; const A_41vdiff34
= alternatif[5] && alternatif[5].nilaiprm1
const A_41fdiff15
= alternatif[6] && alternatif[6].arahprm1 ; const A_41vdiff15
= alternatif[6] && alternatif[6].nilaiprm1
const A_41fdiff25
= alternatif[7] && alternatif[7].arahprm1 ; const A_41vdiff25
= alternatif[7] && alternatif[7].nilaiprm1
const A_41fdiff35
= alternatif[8] && alternatif[8].arahprm1 ; const A_41vdiff35
= alternatif[8] && alternatif[8].nilaiprm1
const A_41fdiff45
= alternatif[9] && alternatif[9].arahprm1 ; const A_41vdiff45
= alternatif[9] && alternatif[9].nilaiprm1
const A_41fdiff16
= alternatif[10] && alternatif[10].arahprm1 ; const A_41vdiff16
= alternatif[10] && alternatif[10].nilaiprm1
const A_41fdiff26
= alternatif[11] && alternatif[11].arahprm1 ; const A_41vdiff26
= alternatif[11] && alternatif[11].nilaiprm1
const A_41fdiff36
= alternatif[12] && alternatif[12].arahprm1 ; const A_41vdiff36
= alternatif[12] && alternatif[12].nilaiprm1
const A_41fdiff46
= alternatif[13] && alternatif[13].arahprm1 ; const A_41vdiff46
= alternatif[13] && alternatif[13].nilaiprm1
const A_41fdiff56
= alternatif[14] && alternatif[14].arahprm1 ; const A_41vdiff56
= alternatif[14] && alternatif[14].nilaiprm1
const A_41fdiff17
= alternatif[15] && alternatif[15].arahprm1 ; const A_41vdiff17
= alternatif[15] && alternatif[15].nilaiprm1
const A_41fdiff27
= alternatif[16] && alternatif[16].arahprm1 ; const A_41vdiff27
= alternatif[16] && alternatif[16].nilaiprm1
const A_41fdiff37
= alternatif[17] && alternatif[17].arahprm1 ; const A_41vdiff37
= alternatif[17] && alternatif[17].nilaiprm1
const A_41fdiff47
= alternatif[18] && alternatif[18].arahprm1 ; const A_41vdiff47
= alternatif[18] && alternatif[18].nilaiprm1
const A_41fdiff57
= alternatif[19] && alternatif[19].arahprm1 ; const A_41vdiff57
= alternatif[19] && alternatif[19].nilaiprm1
const A_41fdiff67
= alternatif[20] && alternatif[20].arahprm1 ; const A_41vdiff67
= alternatif[20] && alternatif[20].nilaiprm1
const A_41face = [A_41fdiff12, A_41fdiff13, A_41fdiff23, A_41fdiff14,
A_41fdiff24, A_41fdiff34, A_41fdiff15, A_41fdiff25, A_41fdiff35, A_41fdiff45, A_41fdiff16,

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A_41fdiff26, A_41fdiff36, A_41fdiff46, A_41fdiff56, A_41fdiff17, A_41fdiff27, A_41fdiff37,
A_41fdiff47, A_41fdiff57, A_41fdiff67]
    const A_41value = [A_41vdiff12, A_41vdiff13, A_41vdiff23, A_41vdiff14,
A_41vdiff24, A_41vdiff34, A_41vdiff15, A_41vdiff25, A_41vdiff35, A_41vdiff45, A_41vdiff16,
A_41vdiff26, A_41vdiff36, A_41vdiff46, A_41vdiff56, A_41vdiff17, A_41vdiff27, A_41vdiff37,
A_41vdiff47, A_41vdiff57, A_41vdiff67]
    const A_42fdiff12
= alternatif[0] && alternatif[0].arahprm2 ;          const A_42vdiff12
= alternatif[0] && alternatif[0].nilaiprm2
    const A_42fdiff13
= alternatif[1] && alternatif[1].arahprm2 ;          const A_42vdiff13
= alternatif[1] && alternatif[1].nilaiprm2
    const A_42fdiff23
= alternatif[2] && alternatif[2].arahprm2 ;          const A_42vdiff23
= alternatif[2] && alternatif[2].nilaiprm2
    const A_42fdiff14
= alternatif[3] && alternatif[3].arahprm2 ;          const A_42vdiff14
= alternatif[3] && alternatif[3].nilaiprm2
    const A_42fdiff24
= alternatif[4] && alternatif[4].arahprm2 ;          const A_42vdiff24
= alternatif[4] && alternatif[4].nilaiprm2
    const A_42fdiff34
= alternatif[5] && alternatif[5].arahprm2 ;          const A_42vdiff34
= alternatif[5] && alternatif[5].nilaiprm2
    const A_42fdiff15
= alternatif[6] && alternatif[6].arahprm2 ;          const A_42vdiff15
= alternatif[6] && alternatif[6].nilaiprm2
    const A_42fdiff25
= alternatif[7] && alternatif[7].arahprm2 ;          const A_42vdiff25
= alternatif[7] && alternatif[7].nilaiprm2
    const A_42fdiff35
= alternatif[8] && alternatif[8].arahprm2 ;          const A_42vdiff35
= alternatif[8] && alternatif[8].nilaiprm2
    const A_42fdiff45
= alternatif[9] && alternatif[9].arahprm2 ;          const A_42vdiff45
= alternatif[9] && alternatif[9].nilaiprm2
    const A_42fdiff16
= alternatif[10] && alternatif[10].arahprm2 ;         const A_42vdiff16
= alternatif[10] && alternatif[10].nilaiprm2
    const A_42fdiff26
= alternatif[11] && alternatif[11].arahprm2 ;         const A_42vdiff26
= alternatif[11] && alternatif[11].nilaiprm2
    const A_42fdiff36
= alternatif[12] && alternatif[12].arahprm2 ;         const A_42vdiff36
= alternatif[12] && alternatif[12].nilaiprm2
    const A_42fdiff46
= alternatif[13] && alternatif[13].arahprm2 ;         const A_42vdiff46
= alternatif[13] && alternatif[13].nilaiprm2
    const A_42fdiff56
= alternatif[14] && alternatif[14].arahprm2 ;         const A_42vdiff56
= alternatif[14] && alternatif[14].nilaiprm2
    const A_42fdiff17
= alternatif[15] && alternatif[15].arahprm2 ;         const A_42vdiff17
= alternatif[15] && alternatif[15].nilaiprm2
    const A_42fdiff27
= alternatif[16] && alternatif[16].arahprm2 ;         const A_42vdiff27
= alternatif[16] && alternatif[16].nilaiprm2

```

```

const A_42fdiff37
= alternatif[17] && alternatif[17].arahprm2 ; const A_42vdiff37
= alternatif[17] && alternatif[17].nilaiprm2
const A_42fdiff47
= alternatif[18] && alternatif[18].arahprm2 ; const A_42vdiff47
= alternatif[18] && alternatif[18].nilaiprm2
const A_42fdiff57
= alternatif[19] && alternatif[19].arahprm2 ; const A_42vdiff57
= alternatif[19] && alternatif[19].nilaiprm2
const A_42fdiff67
= alternatif[20] && alternatif[20].arahprm2 ; const A_42vdiff67
= alternatif[20] && alternatif[20].nilaiprm2
const A_42face = [A_42fdiff12, A_42fdiff13, A_42fdiff23, A_42fdiff14,
A_42fdiff24, A_42fdiff34, A_42fdiff15, A_42fdiff25, A_42fdiff35, A_42fdiff45, A_42fdiff16,
A_42fdiff26, A_42fdiff36, A_42fdiff46, A_42fdiff56, A_42fdiff17, A_42fdiff27, A_42fdiff37,
A_42fdiff47, A_42fdiff57, A_42fdiff67]
const A_42value = [A_42vdiff12, A_42vdiff13, A_42vdiff23, A_42vdiff14,
A_42vdiff24, A_42vdiff34, A_42vdiff15, A_42vdiff25, A_42vdiff35, A_42vdiff45, A_42vdiff16,
A_42vdiff26, A_42vdiff36, A_42vdiff46, A_42vdiff56, A_42vdiff17, A_42vdiff27, A_42vdiff37,
A_42vdiff47, A_42vdiff57, A_42vdiff67]
const A_43fdiff12
= alternatif[0] && alternatif[0].arahprm3 ; const A_43vdiff12
= alternatif[0] && alternatif[0].nilaiprm3
const A_43fdiff13
= alternatif[1] && alternatif[1].arahprm3 ; const A_43vdiff13
= alternatif[1] && alternatif[1].nilaiprm3
const A_43fdiff23
= alternatif[2] && alternatif[2].arahprm3 ; const A_43vdiff23
= alternatif[2] && alternatif[2].nilaiprm3
const A_43fdiff14
= alternatif[3] && alternatif[3].arahprm3 ; const A_43vdiff14
= alternatif[3] && alternatif[3].nilaiprm3
const A_43fdiff24
= alternatif[4] && alternatif[4].arahprm3 ; const A_43vdiff24
= alternatif[4] && alternatif[4].nilaiprm3
const A_43fdiff34
= alternatif[5] && alternatif[5].arahprm3 ; const A_43vdiff34
= alternatif[5] && alternatif[5].nilaiprm3
const A_43fdiff15
= alternatif[6] && alternatif[6].arahprm3 ; const A_43vdiff15
= alternatif[6] && alternatif[6].nilaiprm3
const A_43fdiff25
= alternatif[7] && alternatif[7].arahprm3 ; const A_43vdiff25
= alternatif[7] && alternatif[7].nilaiprm3
const A_43fdiff35
= alternatif[8] && alternatif[8].arahprm3 ; const A_43vdiff35
= alternatif[8] && alternatif[8].nilaiprm3
const A_43fdiff45
= alternatif[9] && alternatif[9].arahprm3 ; const A_43vdiff45
= alternatif[9] && alternatif[9].nilaiprm3
const A_43fdiff16
= alternatif[10] && alternatif[10].arahprm3 ; const A_43vdiff16
= alternatif[10] && alternatif[10].nilaiprm3
const A_43fdiff26
= alternatif[11] && alternatif[11].arahprm3 ; const A_43vdiff26
= alternatif[11] && alternatif[11].nilaiprm3
const A_43fdiff36
= alternatif[12] && alternatif[12].arahprm3 ; const A_43vdiff36
= alternatif[12] && alternatif[12].nilaiprm3

```



```

        const A_43fdiff46
= alternatif[13] && alternatif[13].arahprm3 ;   const A_43vdiff46
= alternatif[13] && alternatif[13].nilaiprm3
        const A_43fdiff56
= alternatif[14] && alternatif[14].arahprm3 ;   const A_43vdiff56
= alternatif[14] && alternatif[14].nilaiprm3
        const A_43fdiff17
= alternatif[15] && alternatif[15].arahprm3 ;   const A_43vdiff17
= alternatif[15] && alternatif[15].nilaiprm3
        const A_43fdiff27
= alternatif[16] && alternatif[16].arahprm3 ;   const A_43vdiff27
= alternatif[16] && alternatif[16].nilaiprm3
        const A_43fdiff37
= alternatif[17] && alternatif[17].arahprm3 ;   const A_43vdiff37
= alternatif[17] && alternatif[17].nilaiprm3
        const A_43fdiff47
= alternatif[18] && alternatif[18].arahprm3 ;   const A_43vdiff47
= alternatif[18] && alternatif[18].nilaiprm3
        const A_43fdiff57
= alternatif[19] && alternatif[19].arahprm3 ;   const A_43vdiff57
= alternatif[19] && alternatif[19].nilaiprm3
        const A_43fdiff67
= alternatif[20] && alternatif[20].arahprm3 ;   const A_43vdiff67
= alternatif[20] && alternatif[20].nilaiprm3
        const A_43face      = [A_43fdiff12, A_43fdiff13, A_43fdiff23, A_43fdiff14,
A_43fdiff24, A_43fdiff34, A_43fdiff15, A_43fdiff25, A_43fdiff35, A_43fdiff45, A_43fdiff16,
A_43fdiff26, A_43fdiff36, A_43fdiff46, A_43fdiff56, A_43fdiff17, A_43fdiff27, A_43fdiff37,
A_43fdiff47, A_43fdiff57, A_43fdiff67]
        const A_43value     = [A_43vdiff12, A_43vdiff13, A_43vdiff23, A_43vdiff14,
A_43vdiff24, A_43vdiff34, A_43vdiff15, A_43vdiff25, A_43vdiff35, A_43vdiff45, A_43vdiff16,
A_43vdiff26, A_43vdiff36, A_43vdiff46, A_43vdiff56, A_43vdiff17, A_43vdiff27, A_43vdiff37,
A_43vdiff47, A_43vdiff57, A_43vdiff67]

        if ( login == 0 ) {
            return (
                <main>
                    <div className="container my-5"/*Login
-----*/>
                    <h1 className="text-primary text-center ">{L_header}</h1>
                    <form onSubmit={HandleLogin} className="container my-5 text-center"
autoComplete="off">
                        <div className="container my-5 text-center">
                            <div className="container my-3"><input type="text" name="username"
placeholder={L_user} /></div>
                            <div className="container my-3"><input type="text" name="password"
placeholder={L_pass} /></div>
                        </div>
                        <Button type="submit">{L_button}</Button>
                    </form>
                </div>
            </main>
        )
    } else if ( login == 1 ) {
        return (
            <main>
                <div className="container my-5"/*Beranda
-----*/>

```

```

        <h1 className="text-primary text-center">{L_header}</h1>
        <div className="text-center container my-3">{B_message}</div>
        <div className="text-center container my-3">{Tips()}</div>
        <h1></h1>
    </div>
    <div className="container my-5"/*InisialKriteria
    -----*/>
        <h1 className="text-primary text-center">{K_header1}</h1>
        <div className="container my-5">{KriteriaTable()}</div>
        <h1></h1>
    </div>
    <div className="container my-5" /*Kriteria
    -----*/>
        <div className="container my-5">{KriteriaVisComp()}</div>
        <div className="text-primary text-center"><Button onClick={() =>
Switches(krits, setKrits)}>{krits == 0 ?("Tampilkan Perbandingan"):"Tampilkan Pie
Chart"}</Button></div>
        </div>
        <div className="container my-5" /*Subkriteria
    -----*/>
            <div className="text-center container my-3">{SubkriteriaTitle()}</div>
            <div className="text-center container"><Nav justify variant="pills"
defaultActiveKey="1">
                <Nav.Item>
                    <Nav.Link eventKey="1" onClick={() =>
setSubs(1)}>{K_kname1}</Nav.Link>
                </Nav.Item>
                <Nav.Item>
                    <Nav.Link eventKey="2" onClick={() =>
setSubs(2)}>{K_kname2}</Nav.Link>
                </Nav.Item>
                <Nav.Item>
                    <Nav.Link eventKey="3" onClick={() =>
setSubs(3)}>{K_kname3}</Nav.Link>
                </Nav.Item>
                <Nav.Item>
                    <Nav.Link eventKey="4" onClick={() =>
setSubs(4)}>{K_kname4}</Nav.Link>
                </Nav.Item>
            </Nav></div>
            <div className="text-center container my-3">{SubkriteriaTable()}</div>
            <div className="container my-5">{SubkriteriaVisComp()}</div>
            <div className="text-primary text-center"><Button onClick={() =>
Switches(subss, setSubss)}>{subss == 0 ?("Tampilkan Perbandingan"):"Tampilkan Pie
Chart"}</Button></div>
            </div>
            <div className="container my-5"/*Alternatif
    -----*/>
                <h1 className="text-primary text-center">{A_header}</h1>
                <div className="text-center container my-3">{AlternatifTable()}</div>
                <div className="text-center container my-3">{AlternatifVisComp()}</div>
                <div className="text-primary text-center"><Button onClick={() =>
Switches(altss, setAltss)}>{altss == 0 ?("Tampilkan Perbandingan"):"Tampilkan Pie
Chart"}</Button></div>
            </div>

```

```

        <div className="container my-5"/*Export
        -----*/>
        -----*/>
        <div className="text-center container my-3"><Button onClick={() =>
setLogin(2)}>Eksport Hasil AHP dalam PDF</Button></div>
        </div>
        <div className="container my-5 text-center"/*Logout
        -----*/>
        -----*/>
        <button onClick={HandleLogout}><h6>Logout</h6></button>
        </div>
    </main>
    )) else if ( login == 2 ) {
    return (
    <main>
    <div className="container my-5"/*SavePDF
    -----*/>
    -----*/>
    <div ref={ref}>
    <h2 className="container my-5"><br /><br /><div
className="headerPDF">Hasil Perhitungan Aplikasi AHP</div></h2>
    {A_n >= 1 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname01} :</h6><h4
className="bodyPDF2">{Number(A_aahp01*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 2 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname02} :</h6><h4
className="bodyPDF2">{Number(A_aahp02*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 3 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname03} :</h6><h4
className="bodyPDF2">{Number(A_aahp03*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 4 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname04} :</h6><h4
className="bodyPDF2">{Number(A_aahp04*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 5 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname05} :</h6><h4
className="bodyPDF2">{Number(A_aahp05*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 6 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname06} :</h6><h4
className="bodyPDF2">{Number(A_aahp06*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    {A_n >= 7 ? (<div><div className="container" /><h6
className="bodyPDF">{A_aname07} :</h6><h4
className="bodyPDF2">{Number(A_aahp07*100).toFixed(2)}{G_percent}</h4></div>):( <div></div>
)}
    <h6 className="container my-5"><div
className="headerPDF">{Prioritas()}</div></h6>
    </div>
    <Pdf className="container my-5" targetRef={ref} filename="hasilahp.pdf"
scale={1} x={.8} y={.8}>
    {({ toPdf }) => <div className="text-center container my-3"><Button
onClick={toPdf}>Simpan PDF</Button></div>}
    </Pdf>
    <div className="text-center container my-5"><button onClick={() =>
setLogin(1)}>Kembali</button></div>

```

```

        </div>
    </main>
  )} else {
  return(
    <main>
      <div className="container my-5"/*Warning
      -----*/>
      <h1 className="text-primary text-center">{L_header}</h1>
      <div className="container my-5 text-center">{L_warn}</div>
      <div className="container my-5 text-center">
        <Button onClick={HandleLogout}>{L_back}</Button>
      </div>
    </div>
  </main>
  )
  }
}

export default Pages;

```

## LAMPIRAN 2

### Source code engine.tsx (perhitungan AHP)

```
import { mean, sum } from 'mathjs';
import Update from './update';

function Engine ( F, V, F0, V0, ID0, SUB, NO, INDEKS, ERRORS, TYPE, KRITERIA, SUBKRITERIA,
PRD, PRC, PLC, PRM) {

  const face = F
  const value = V

  //General
  const dbname = "ahpdatabase"
  const tablename2 = "konsistensi"
  const table2col1 = "cr"
  const table2col2 = "status"
  //Kriteria
  const tablename3 = "nilaikriteria"
  const table3col1 = "nilai"
  const table3col2 = "stdev"
  const table2row1 = "2001"
  const table3row1 = "3001"
  const table3row2 = "3002"
  const table3row3 = "3003"
  const table3row4 = "3004"
  //Subkriteria
  const tablename5 = "nilaisubkriteria"
  const table5col1 = "nilai"
  const table5col3 = "stdev"
  const table2row11 = "2002"
  const table2row12 = "2003"
  const table2row13 = "2004"
  const table2row14 = "2005"
  const table5row11 = "5001"
  const table5row12 = "5002"
  const table5row13 = "5003"
  const table5row21 = "5007"
  const table5row22 = "5008"
  const table5row23 = "5009"
  const table5row31 = "5013"
  const table5row32 = "5014"
  const table5row33 = "5015"
  const table5row41 = "5019"
  const table5row42 = "5020"
  const table5row43 = "5021"
  let table2row2 = "2000"
  let table5row1 = "6000"
  let table5row2 = "6000"
  let table5row3 = "6000"
  //Alternatif
  const tablename7 = "nilaialternatif"
  const table7col111 = "prd1"
  const table7col113 = "stdevprd1"
  const table7col121 = "prd2"
  const table7col123 = "stdevprd2"
  const table7col131 = "prd3"
```

```

const table7col133 = "stdevprd3"
const table7col211 = "prc1"
const table7col213 = "stdevprc1"
const table7col221 = "prc2"
const table7col223 = "stdevprc2"
const table7col231 = "prc3"
const table7col233 = "stdevprc3"
const table7col311 = "plc1"
const table7col313 = "stdevplc1"
const table7col321 = "plc2"
const table7col323 = "stdevplc2"
const table7col331 = "plc3"
const table7col333 = "stdevplc3"
const table7col411 = "prm1"
const table7col413 = "stdevprm1"
const table7col421 = "prm2"
const table7col423 = "stdevprm2"
const table7col431 = "prm3"
const table7col433 = "stdevprm3"
const table2row201 = "2006"
const table2row202 = "2007"
const table2row203 = "2008"
const table2row204 = "2009"
const table2row205 = "2010"
const table2row206 = "2011"
const table2row207 = "2012"
const table2row208 = "2013"
const table2row209 = "2014"
const table2row210 = "2015"
const table2row211 = "2016"
const table2row212 = "2017"
const table7row1 = "7001"
const table7row2 = "7002"
const table7row3 = "7003"
const table7row4 = "7004"
const table7row5 = "7005"
const table7row6 = "7006"
const table7row7 = "7007"
let table7col1 = ""
let table7col3 = ""
let table2row3 = ""

let id = 99

if (F0 == `L`) {
  F0 = 'L'
} else {
  F0 = 'R'
}

if ( TYPE == 1 ) {

  id = ID0 - 4001

}

if ( TYPE == 2 ) {

  if ( SUB == 1 ) {

```

```

        table5row1 = table5row11
        table5row2 = table5row12
        table5row3 = table5row13
        table2row2 = table2row11
        id = ID0 - 6001
    }
    if ( SUB == 2 ) {
        table5row1 = table5row21
        table5row2 = table5row22
        table5row3 = table5row23
        table2row2 = table2row12
        id = ID0 - 6016
    }
    if ( SUB == 3 ) {
        table5row1 = table5row31
        table5row2 = table5row32
        table5row3 = table5row33
        table2row2 = table2row13
        id = ID0 - 6031
    }
    if ( SUB == 4 ) {
        table5row1 = table5row41
        table5row2 = table5row42
        table5row3 = table5row43
        table2row2 = table2row14
        id = ID0 - 6046
    }
}

if ( TYPE == 3 ) {

    if ( SUB == 1 ) {
        table7col1 = table7col111
        table7col3 = table7col113
        table2row3 = table2row201
    }
    if ( SUB == 2 ) {
        table7col1 = table7col121
        table7col3 = table7col123
        table2row3 = table2row202
    }
    if ( SUB == 3 ) {
        table7col1 = table7col131
        table7col3 = table7col133
        table2row3 = table2row203
    }
    if ( SUB == 4 ) {
        table7col1 = table7col211
        table7col3 = table7col213
        table2row3 = table2row204
    }
    if ( SUB == 5 ) {
        table7col1 = table7col221
        table7col3 = table7col223
        table2row3 = table2row205
    }
    if ( SUB == 6 ) {
        table7col1 = table7col231

```

```

        table7col3 = table7col233
        table2row3 = table2row206
    }
    if ( SUB == 7) {
        table7col1 = table7col311
        table7col3 = table7col313
        table2row3 = table2row207
    }
    if ( SUB == 8) {
        table7col1 = table7col321
        table7col3 = table7col323
        table2row3 = table2row208
    }
    if ( SUB == 9) {
        table7col1 = table7col331
        table7col3 = table7col333
        table2row3 = table2row209
    }
    if ( SUB == 10) {
        table7col1 = table7col411
        table7col3 = table7col413
        table2row3 = table2row210
    }
    if ( SUB == 11) {
        table7col1 = table7col421
        table7col3 = table7col423
        table2row3 = table2row211
    }
    if ( SUB == 12) {
        table7col1 = table7col431
        table7col3 = table7col433
        table2row3 = table2row212
    }
    }

    id = ID0 - 8001

}

face[id] = F0
value[id] = V0

let arrayCal1 = []
let arrayCal2 = []
const a = 0;
const b = 1; const c = 2;
const d = 3; const e = 4; const f = 5;
const g = 6; const h = 7; const i = 8; const j = 9;
const k = 10; const l = 11; const m = 12; const n = 13; const o = 14;
const p = 15; const q = 16; const r = 17; const s = 18; const t = 19; const u = 20;
const v = 21;
const space = " "
let z = 0 ;
let r1 = 0; let r2 = 0; let r3 = 0; let r4 = 0; let r5 = 0; let r6 = 0; let r7 = 0;
let v1 = 0; let v2 = 0; let v3 = 0; let v4 = 0; let v5 = 0; let v6 = 0; let v7 = 0;
let s1 = 0; let s2 = 0; let s3 = 0; let s4 = 0;
let PIV = 0; let CI = 0; let CR = 0; let status = 0;

function inputn(x) {
    z = x * 0 + 1

```



```

}

function inputs(x) {
  if (face[x] == "L") {
    z = value[x]
  } else {
    z = 1 / value[x]
  }
}

function inputz(x) {
  if (face[x] == "R") {
    z = value[x]
  } else {
    z = 1 / value[x]
  }
}

inputn(v); arrayCal1[0] = z;      inputs(a); arrayCal1[1] = z;      inputs(b);
arrayCal1[2] = z;      inputs(d); arrayCal1[3] = z;      inputs(g); arrayCal1[4] = z;
inputs(k); arrayCal1[5] = z;      inputs(p); arrayCal1[6] = z
  inputz(a); arrayCal1[7] = z;      inputn(v); arrayCal1[8] = z;      inputs(c);
arrayCal1[9] = z;      inputs(e); arrayCal1[10] = z;      inputs(h); arrayCal1[11] = z;
inputs(l); arrayCal1[12] = z;      inputs(q); arrayCal1[13] = z
  inputz(b); arrayCal1[14] = z;      inputz(c); arrayCal1[15] = z;      inputn(v);
arrayCal1[16] = z;      inputs(f); arrayCal1[17] = z;      inputs(i); arrayCal1[18] = z;
inputs(m); arrayCal1[19] = z;      inputs(r); arrayCal1[20] = z
  inputz(d); arrayCal1[21] = z;      inputz(e); arrayCal1[22] = z;      inputz(f);
arrayCal1[23] = z;      inputn(v); arrayCal1[24] = z;      inputs(j); arrayCal1[25] = z;
inputs(n); arrayCal1[26] = z;      inputs(s); arrayCal1[27] = z
  inputz(g); arrayCal1[28] = z;      inputz(h); arrayCal1[29] = z;      inputz(i);
arrayCal1[30] = z;      inputz(j); arrayCal1[31] = z;      inputn(v); arrayCal1[32] = z;
inputs(o); arrayCal1[33] = z;      inputs(t); arrayCal1[34] = z
  inputz(k); arrayCal1[35] = z;      inputz(l); arrayCal1[36] = z;      inputz(m);
arrayCal1[37] = z;      inputz(n); arrayCal1[38] = z;      inputz(o); arrayCal1[39] = z;
inputn(v); arrayCal1[40] = z;      inputs(u); arrayCal1[41] = z
  inputz(p); arrayCal1[42] = z;      inputz(q); arrayCal1[43] = z;      inputz(r);
arrayCal1[44] = z;      inputz(s); arrayCal1[45] = z;      inputz(t); arrayCal1[46] = z;
inputz(u); arrayCal1[47] = z;      inputn(v); arrayCal1[48] = z

  if ( NO <= 6 ) { arrayCal1[6] = 0; arrayCal1[13] = 0; arrayCal1[20] = 0; arrayCal1[27]
= 0; arrayCal1[34] = 0; arrayCal1[41] = 0; arrayCal1[42] = 0; arrayCal1[43] = 0;
arrayCal1[44] = 0; arrayCal1[45] = 0; arrayCal1[46] = 0; arrayCal1[47] = 0; arrayCal1[48]
= 0; }
  if ( NO <= 5 ) { arrayCal1[5] = 0; arrayCal1[12] = 0; arrayCal1[19] = 0; arrayCal1[26]
= 0; arrayCal1[33] = 0; arrayCal1[35] = 0; arrayCal1[36] = 0; arrayCal1[37] = 0;
arrayCal1[38] = 0; arrayCal1[39] = 0; arrayCal1[40] = 0; }
  if ( NO <= 4 ) { arrayCal1[4] = 0; arrayCal1[11] = 0; arrayCal1[18] = 0; arrayCal1[25]
= 0; arrayCal1[28] = 0; arrayCal1[29] = 0; arrayCal1[30] = 0; arrayCal1[31] = 0;
arrayCal1[32] = 0; }
  if ( NO <= 3 ) { arrayCal1[3] = 0; arrayCal1[10] = 0; arrayCal1[17] = 0; arrayCal1[21]
= 0; arrayCal1[22] = 0; arrayCal1[23] = 0; arrayCal1[24] = 0; }
  if ( NO <= 2 ) { arrayCal1[2] = 0; arrayCal1[9] = 0; arrayCal1[14] = 0; arrayCal1[15]
= 0; arrayCal1[16] = 0; }
  if ( NO <= 1 ) { arrayCal1[1] = 0; arrayCal1[7] = 0; arrayCal1[8] = 0; }

console.log("A"+NO)
console.log(arrayCal1)

```

```

    r1 = sum(arrayCal1[0], arrayCal1[7], arrayCal1[14], arrayCal1[21], arrayCal1[28],
arrayCal1[35], arrayCal1[42]);
    r2 = sum(arrayCal1[1], arrayCal1[8], arrayCal1[15], arrayCal1[22], arrayCal1[29],
arrayCal1[36], arrayCal1[43]);
    r3 = sum(arrayCal1[2], arrayCal1[9], arrayCal1[16], arrayCal1[23], arrayCal1[30],
arrayCal1[37], arrayCal1[44]);
    r4 = sum(arrayCal1[3], arrayCal1[10], arrayCal1[17], arrayCal1[24], arrayCal1[31],
arrayCal1[38], arrayCal1[45]);
    r5 = sum(arrayCal1[4], arrayCal1[11], arrayCal1[18], arrayCal1[25], arrayCal1[32],
arrayCal1[39], arrayCal1[46]);
    r6 = sum(arrayCal1[5], arrayCal1[12], arrayCal1[19], arrayCal1[26], arrayCal1[33],
arrayCal1[40], arrayCal1[47]);
    r7 = sum(arrayCal1[6], arrayCal1[13], arrayCal1[20], arrayCal1[27], arrayCal1[34],
arrayCal1[41], arrayCal1[48]);

    console.log("B"+NO)
    console.log(r1+r2+r3+r4+r5+r6+r7)

    z = arrayCal1[0] / r1; arrayCal2[0] = z;      z = arrayCal1[1] / r2; arrayCal2[1] =
z;      z = arrayCal1[2] / r3; arrayCal2[2] = z;      z = arrayCal1[3] / r4;
arrayCal2[3] = z;      z = arrayCal1[4] / r5; arrayCal2[4] = z;      z = arrayCal1[5]
/ r6; arrayCal2[5] = z;      z = arrayCal1[6] / r7; arrayCal2[6] = z;
    z = arrayCal1[7] / r1; arrayCal2[7] = z;      z = arrayCal1[8] / r2; arrayCal2[8] =
z;      z = arrayCal1[9] / r3; arrayCal2[9] = z;      z = arrayCal1[10] / r4;
arrayCal2[10] = z;      z = arrayCal1[11] / r5; arrayCal2[11] = z;      z = arrayCal1[12]
/ r6; arrayCal2[12] = z;      z = arrayCal1[13] / r7; arrayCal2[13] = z;
    z = arrayCal1[14] / r1; arrayCal2[14] = z;      z = arrayCal1[15] / r2; arrayCal2[15]
= z;      z = arrayCal1[16] / r3; arrayCal2[16] = z;      z = arrayCal1[17] / r4;
arrayCal2[17] = z;      z = arrayCal1[18] / r5; arrayCal2[18] = z;      z = arrayCal1[19]
/ r6; arrayCal2[19] = z;      z = arrayCal1[20] / r7; arrayCal2[20] = z;
    z = arrayCal1[21] / r1; arrayCal2[21] = z;      z = arrayCal1[22] / r2; arrayCal2[22]
= z;      z = arrayCal1[23] / r3; arrayCal2[23] = z;      z = arrayCal1[24] / r4;
arrayCal2[24] = z;      z = arrayCal1[25] / r5; arrayCal2[25] = z;      z = arrayCal1[26]
/ r6; arrayCal2[26] = z;      z = arrayCal1[27] / r7; arrayCal2[27] = z;
    z = arrayCal1[28] / r1; arrayCal2[28] = z;      z = arrayCal1[29] / r2; arrayCal2[29]
= z;      z = arrayCal1[30] / r3; arrayCal2[30] = z;      z = arrayCal1[31] / r4;
arrayCal2[31] = z;      z = arrayCal1[32] / r5; arrayCal2[32] = z;      z = arrayCal1[33]
/ r6; arrayCal2[33] = z;      z = arrayCal1[34] / r7; arrayCal2[34] = z;
    z = arrayCal1[35] / r1; arrayCal2[35] = z;      z = arrayCal1[36] / r2; arrayCal2[36]
= z;      z = arrayCal1[37] / r3; arrayCal2[37] = z;      z = arrayCal1[38] / r4;
arrayCal2[38] = z;      z = arrayCal1[39] / r5; arrayCal2[39] = z;      z = arrayCal1[40]
/ r6; arrayCal2[40] = z;      z = arrayCal1[41] / r7; arrayCal2[41] = z;
    z = arrayCal1[42] / r1; arrayCal2[42] = z;      z = arrayCal1[43] / r2; arrayCal2[43]
= z;      z = arrayCal1[44] / r3; arrayCal2[44] = z;      z = arrayCal1[45] / r4;
arrayCal2[45] = z;      z = arrayCal1[46] / r5; arrayCal2[46] = z;      z = arrayCal1[47]
/ r6; arrayCal2[47] = z;      z = arrayCal1[48] / r7; arrayCal2[48] = z;

    if ( r1 == 0 ) { arrayCal2[0] = 0;      arrayCal2[7] = 0;      arrayCal2[14] = 0;
arrayCal2[21] = 0;      arrayCal2[28] = 0;      arrayCal2[35] = 0;      arrayCal2[42] = 0; }
    if ( r2 == 0 ) { arrayCal2[1] = 0;      arrayCal2[8] = 0;      arrayCal2[15] = 0;
arrayCal2[22] = 0;      arrayCal2[29] = 0;      arrayCal2[36] = 0;      arrayCal2[43] = 0; }
    if ( r3 == 0 ) { arrayCal2[2] = 0;      arrayCal2[9] = 0;      arrayCal2[16] = 0;
arrayCal2[23] = 0;      arrayCal2[30] = 0;      arrayCal2[37] = 0;      arrayCal2[44] = 0; }
    if ( r4 == 0 ) { arrayCal2[3] = 0;      arrayCal2[10] = 0;      arrayCal2[17] = 0;
arrayCal2[24] = 0;      arrayCal2[31] = 0;      arrayCal2[38] = 0;      arrayCal2[45] = 0; }
    if ( r5 == 0 ) { arrayCal2[4] = 0;      arrayCal2[11] = 0;      arrayCal2[18] = 0;
arrayCal2[25] = 0;      arrayCal2[32] = 0;      arrayCal2[39] = 0;      arrayCal2[46] = 0; }
    if ( r6 == 0 ) { arrayCal2[5] = 0;      arrayCal2[12] = 0;      arrayCal2[19] = 0;
arrayCal2[26] = 0;      arrayCal2[33] = 0;      arrayCal2[40] = 0;      arrayCal2[47] = 0; }

```

```

    if ( r7 == 0 ) { arrayCal2[6] = 0;    arrayCal2[13] = 0;    arrayCal2[20] = 0;
arrayCal2[27] = 0;    arrayCal2[34] = 0;    arrayCal2[41] = 0;    arrayCal2[48] = 0; }

    if ( NO == 7 ) {
        v1 = mean(arrayCal2[0], arrayCal2[1], arrayCal2[2], arrayCal2[3],
arrayCal2[4], arrayCal2[5], arrayCal2[6]);
        v2 = mean(arrayCal2[7], arrayCal2[8], arrayCal2[9], arrayCal2[10],
arrayCal2[11], arrayCal2[12], arrayCal2[13]);
        v3 = mean(arrayCal2[14], arrayCal2[15], arrayCal2[16], arrayCal2[17],
arrayCal2[18], arrayCal2[19], arrayCal2[20]);
        v4 = mean(arrayCal2[21], arrayCal2[22], arrayCal2[23], arrayCal2[24],
arrayCal2[25], arrayCal2[26], arrayCal2[27]);
        v5 = mean(arrayCal2[28], arrayCal2[29], arrayCal2[30], arrayCal2[31],
arrayCal2[32], arrayCal2[33], arrayCal2[34]);
        v6 = mean(arrayCal2[35], arrayCal2[36], arrayCal2[37], arrayCal2[38],
arrayCal2[39], arrayCal2[40], arrayCal2[41]);
        v7 = mean(arrayCal2[42], arrayCal2[43], arrayCal2[44], arrayCal2[45],
arrayCal2[46], arrayCal2[47], arrayCal2[48]);
    }

    if ( NO == 6 ) {
        v1 = mean(arrayCal2[0], arrayCal2[1], arrayCal2[2], arrayCal2[3],
arrayCal2[4], arrayCal2[5]);
        v2 = mean(arrayCal2[7], arrayCal2[8], arrayCal2[9], arrayCal2[10],
arrayCal2[11], arrayCal2[12]);
        v3 = mean(arrayCal2[14], arrayCal2[15], arrayCal2[16], arrayCal2[17],
arrayCal2[18], arrayCal2[19]);
        v4 = mean(arrayCal2[21], arrayCal2[22], arrayCal2[23], arrayCal2[24],
arrayCal2[25], arrayCal2[26]);
        v5 = mean(arrayCal2[28], arrayCal2[29], arrayCal2[30], arrayCal2[31],
arrayCal2[32], arrayCal2[33]);
        v6 = mean(arrayCal2[35], arrayCal2[36], arrayCal2[37], arrayCal2[38],
arrayCal2[39], arrayCal2[40]);
    }

    if ( NO == 5 ) {
        v1 = mean(arrayCal2[0], arrayCal2[1], arrayCal2[2], arrayCal2[3],
arrayCal2[4]);
        v2 = mean(arrayCal2[7], arrayCal2[8], arrayCal2[9], arrayCal2[10],
arrayCal2[11]);
        v3 = mean(arrayCal2[14], arrayCal2[15], arrayCal2[16], arrayCal2[17],
arrayCal2[18]);
        v4 = mean(arrayCal2[21], arrayCal2[22], arrayCal2[23], arrayCal2[24],
arrayCal2[25]);
        v5 = mean(arrayCal2[28], arrayCal2[29], arrayCal2[30], arrayCal2[31],
arrayCal2[32]);
    }

    if ( NO == 4 ) {
        v1 = mean(arrayCal2[0], arrayCal2[1], arrayCal2[2], arrayCal2[3]);
        v2 = mean(arrayCal2[7], arrayCal2[8], arrayCal2[9], arrayCal2[10]);
        v3 = mean(arrayCal2[14], arrayCal2[15], arrayCal2[16], arrayCal2[17]);
        v4 = mean(arrayCal2[21], arrayCal2[22], arrayCal2[23], arrayCal2[24]);
    }

    if ( NO == 3 ) {
        v1 = mean(arrayCal2[0], arrayCal2[1], arrayCal2[2]);
        v2 = mean(arrayCal2[7], arrayCal2[8], arrayCal2[9]);
        v3 = mean(arrayCal2[14], arrayCal2[15], arrayCal2[16]);
    }

```

```

}

if ( NO == 2 ) {
    v1 = mean(arrayCal2[0], arrayCal2[1]);
    v2 = mean(arrayCal2[7], arrayCal2[8]);
}

if ( NO == 1 ) {
    v1 = mean(arrayCal2[0]);
    v2 = mean(arrayCal2[7]);
    v3 = mean(arrayCal2[14]);
    v4 = mean(arrayCal2[21]);
    v5 = mean(arrayCal2[28]);
    v6 = mean(arrayCal2[35]);
    v7 = mean(arrayCal2[42]);
}

PIV = v1 * r1 + v2 * r2 + v3 * r3 + v4 * r4 + v5 * r5 + v6 * r6 + v7 * r7 ;
CI = ( PIV - NO ) / ( NO - 1 );
CR = CI / INDEKS;

if ( CR <= ERRORS ) {
    status = 1
} else {
    status = 0
}

if ( NO <= 2 ) {
    status = 1
    CR = 0
}

if ( CR <= 0 ) {
    CR = 0
}

console.log(v1+space+v2+space+v3+space+v4+space+v5+space+v6+space+v7)

if ( TYPE == 1 ) {
    Update(dbname, tablename3, table3col1, v1, table3row1)
    Update(dbname, tablename3, table3col1, v2, table3row2)
    Update(dbname, tablename3, table3col1, v3, table3row3)
    Update(dbname, tablename3, table3col1, v4, table3row4)
}
if ( TYPE == 2 ) {
    Update(dbname, tablename5, table5col1, v1, table5row1)
    Update(dbname, tablename5, table5col1, v2, table5row2)
    Update(dbname, tablename5, table5col1, v3, table5row3)
}
if ( TYPE == 3 ) {
    Update(dbname, tablename7, table7col1, v1, table7row1)
    Update(dbname, tablename7, table7col1, v2, table7row2)
    Update(dbname, tablename7, table7col1, v3, table7row3)
    Update(dbname, tablename7, table7col1, v4, table7row4)
    Update(dbname, tablename7, table7col1, v5, table7row5)
    Update(dbname, tablename7, table7col1, v6, table7row6)
    Update(dbname, tablename7, table7col1, v7, table7row7)
}

```

```

    console.log("PIV: "+PIV+"    N: "+NO+"    CI: "+CI+"    CR: "+CR+"    Status:
"+status)
    console.log("-----")

    if ( TYPE == 1 ) {
        Update(dbname, tablename2, table2col1, CR, table2row1)
        Update(dbname, tablename2, table2col2, status, table2row1)
    }
    if ( TYPE == 2 ) {
        Update(dbname, tablename2, table2col1, CR, table2row2)
        Update(dbname, tablename2, table2col2, status, table2row2)
    }
    if ( TYPE == 3 ) {
        Update(dbname, tablename2, table2col1, CR, table2row3)
        Update(dbname, tablename2, table2col2, status, table2row3)
    }

    if ( TYPE == 1 ) {
        Update(dbname, tablename3, table3col2, s1, table3row1)
        Update(dbname, tablename3, table3col2, s2, table3row2)
        Update(dbname, tablename3, table3col2, s3, table3row3)
        Update(dbname, tablename3, table3col2, s4, table3row4)
    }
    if ( TYPE == 2 ) {
        Update(dbname, tablename5, table5col3, s1, table5row1)
        Update(dbname, tablename5, table5col3, s2, table5row2)
        Update(dbname, tablename5, table5col3, s3, table5row3)
    }
    if ( TYPE == 3 ) {
        Update(dbname, tablename7, table7col3, v1, table7row1)
        Update(dbname, tablename7, table7col3, v2, table7row2)
        Update(dbname, tablename7, table7col3, v3, table7row3)
        Update(dbname, tablename7, table7col3, v4, table7row4)
        Update(dbname, tablename7, table7col3, v5, table7row5)
        Update(dbname, tablename7, table7col3, v6, table7row6)
        Update(dbname, tablename7, table7col3, v7, table7row7)
    }

    //-----
    -----
    ----
    let kriteria    = KRITERIA
    let subkriteria = SUBKRITERIA
    let alternatifprd = PRD
    let alternatifprc = PRC
    let alternatifplc = PLC
    let alternatifprm = PRM

    if ( TYPE == 1 ) {
        kriteria = [ v1, v2, v3, v4 ]
    }
    if ( TYPE == 2 ) {
        if ( SUB == 1 ) {
            subkriteria = [ v1, v2, v3, SUBKRITERIA[3], SUBKRITERIA[4], SUBKRITERIA[5],
SUBKRITERIA[6], SUBKRITERIA[7], SUBKRITERIA[8], SUBKRITERIA[9], SUBKRITERIA[10],
SUBKRITERIA[11] ]
        }
        if ( SUB == 2 ) {

```

```

        subkriteria = [ SUBKRITERIA[0], SUBKRITERIA[1], SUBKRITERIA[2], v1, v2, v3,
SUBKRITERIA[6], SUBKRITERIA[7], SUBKRITERIA[8], SUBKRITERIA[9], SUBKRITERIA[10],
SUBKRITERIA[11] ]
    }
    if ( SUB == 3 ) {
        subkriteria = [ SUBKRITERIA[0], SUBKRITERIA[1], SUBKRITERIA[2],
SUBKRITERIA[3], SUBKRITERIA[4], SUBKRITERIA[5], v1, v2, v3, SUBKRITERIA[9],
SUBKRITERIA[10], SUBKRITERIA[11] ]
    }
    if ( SUB == 4 ) {
        subkriteria = [ SUBKRITERIA[0], SUBKRITERIA[1], SUBKRITERIA[2],
SUBKRITERIA[3], SUBKRITERIA[4], SUBKRITERIA[5], SUBKRITERIA[6], SUBKRITERIA[7],
SUBKRITERIA[8], v1, v2, v3 ]
    }
}
if ( TYPE == 3 ) {
    if ( SUB == 1 ) {
        alternatifprd = [ v1, v2, v3, v4, v5, v6, v7, PRD[7], PRD[8], PRD[9], PRD[10],
PRD[11], PRD[12], PRD[13], PRD[14], PRD[15], PRD[16], PRD[17], PRD[18], PRD[19], PRD[20] ]
    }
    if ( SUB == 2 ) {
        alternatifprd = [ PRD[0], PRD[1], PRD[2], PRD[3], PRD[4], PRD[5], PRD[6], v1,
v2, v3, v4, v5, v6, v7, PRD[14], PRD[15], PRD[16], PRD[17], PRD[18], PRD[19], PRD[20] ]
    }
    if ( SUB == 3 ) {
        alternatifprd = [ PRD[0], PRD[1], PRD[2], PRD[3], PRD[4], PRD[5], PRD[6],
PRD[7], PRD[8], PRD[9], PRD[10], PRD[11], PRD[12], PRD[13], v1, v2, v3, v4, v5, v6, v7 ]
    }
    if ( SUB == 4 ) {
        alternatifprc = [ v1, v2, v3, v4, v5, v6, v7, PRC[7], PRC[8], PRC[9], PRC[10],
PRC[11], PRC[12], PRC[13], PRC[14], PRC[15], PRC[16], PRC[17], PRC[18], PRC[19], PRC[20] ]
    }
    if ( SUB == 5 ) {
        alternatifprc = [ PRC[0], PRC[1], PRC[2], PRC[3], PRC[4], PRC[5], PRC[6], v1,
v2, v3, v4, v5, v6, v7, PRC[14], PRC[15], PRC[16], PRC[17], PRC[18], PRC[19], PRC[20] ]
    }
    if ( SUB == 6 ) {
        alternatifprc = [ PRC[0], PRC[1], PRC[2], PRC[3], PRC[4], PRC[5], PRC[6],
PRC[7], PRC[8], PRC[9], PRC[10], PRC[11], PRC[12], PRC[13], v1, v2, v3, v4, v5, v6, v7 ]
    }
    if ( SUB == 7 ) {
        alternatifplc = [ v1, v2, v3, v4, v5, v6, v7, PLC[7], PLC[8], PLC[9], PLC[10],
PLC[11], PLC[12], PLC[13], PLC[14], PLC[15], PLC[16], PLC[17], PLC[18], PLC[19], PLC[20] ]
    }
    if ( SUB == 8 ) {
        alternatifplc = [ PLC[0], PLC[1], PLC[2], PLC[3], PLC[4], PLC[5], PLC[6], v1,
v2, v3, v4, v5, v6, v7, PLC[14], PLC[15], PLC[16], PLC[17], PLC[18], PLC[19], PLC[20] ]
    }
    if ( SUB == 9 ) {
        alternatifplc = [ PLC[0], PLC[1], PLC[2], PLC[3], PLC[4], PLC[5], PLC[6],
PLC[7], PLC[8], PLC[9], PLC[10], PLC[11], PLC[12], PLC[13], v1, v2, v3, v4, v5, v6, v7 ]
    }
    if ( SUB == 10 ) {
        alternatifprm = [ v1, v2, v3, v4, v5, v6, v7, PRM[7], PRM[8], PRM[9], PRM[10],
PRM[11], PRM[12], PRM[13], PRM[14], PRM[15], PRM[16], PRM[17], PRM[18], PRM[19], PRM[20] ]
    }
    if ( SUB == 11 ) {
        alternatifprm = [ PRM[0], PRM[1], PRM[2], PRM[3], PRM[4], PRM[5], PRM[6], v1,
v2, v3, v4, v5, v6, v7, PRM[14], PRM[15], PRM[16], PRM[17], PRM[18], PRM[19], PRM[20] ]
    }
}

```

```

    }
    if ( SUB == 12 ) {
        alternatifprm = [ PRM[0], PRM[1], PRM[2], PRM[3], PRM[4], PRM[5], PRM[6],
PRM[7], PRM[8], PRM[9], PRM[10], PRM[11], PRM[12], PRM[13], v1, v2, v3, v4, v5, v6, v7 ]
    }
}

let subkriteria01 = 0
let subkriteria02 = 0
let subkriteria03 = 0
let subkriteria04 = 0
let subkriteria05 = 0
let subkriteria06 = 0
let subkriteria07 = 0
let subkriteria08 = 0
let subkriteria09 = 0
let subkriteria10 = 0
let subkriteria11 = 0
let subkriteria12 = 0

let alternatif0101 = 0
let alternatif0102 = 0
let alternatif0103 = 0
let alternatif0104 = 0
let alternatif0105 = 0
let alternatif0106 = 0
let alternatif0107 = 0
let alternatif0201 = 0
let alternatif0202 = 0
let alternatif0203 = 0
let alternatif0204 = 0
let alternatif0205 = 0
let alternatif0206 = 0
let alternatif0207 = 0
let alternatif0301 = 0
let alternatif0302 = 0
let alternatif0303 = 0
let alternatif0304 = 0
let alternatif0305 = 0
let alternatif0306 = 0
let alternatif0307 = 0
let alternatif0401 = 0
let alternatif0402 = 0
let alternatif0403 = 0
let alternatif0404 = 0
let alternatif0405 = 0
let alternatif0406 = 0
let alternatif0407 = 0
let alternatif0501 = 0
let alternatif0502 = 0
let alternatif0503 = 0
let alternatif0504 = 0
let alternatif0505 = 0
let alternatif0506 = 0
let alternatif0507 = 0
let alternatif0601 = 0
let alternatif0602 = 0
let alternatif0603 = 0
let alternatif0604 = 0

```

```
let alternatif0605 = 0
let alternatif0606 = 0
let alternatif0607 = 0
let alternatif0701 = 0
let alternatif0702 = 0
let alternatif0703 = 0
let alternatif0704 = 0
let alternatif0705 = 0
let alternatif0706 = 0
let alternatif0707 = 0
let alternatif0801 = 0
let alternatif0802 = 0
let alternatif0803 = 0
let alternatif0804 = 0
let alternatif0805 = 0
let alternatif0806 = 0
let alternatif0807 = 0
let alternatif0901 = 0
let alternatif0902 = 0
let alternatif0903 = 0
let alternatif0904 = 0
let alternatif0905 = 0
let alternatif0906 = 0
let alternatif0907 = 0
let alternatif1001 = 0
let alternatif1002 = 0
let alternatif1003 = 0
let alternatif1004 = 0
let alternatif1005 = 0
let alternatif1006 = 0
let alternatif1007 = 0
let alternatif1101 = 0
let alternatif1102 = 0
let alternatif1103 = 0
let alternatif1104 = 0
let alternatif1105 = 0
let alternatif1106 = 0
let alternatif1107 = 0
let alternatif1201 = 0
let alternatif1202 = 0
let alternatif1203 = 0
let alternatif1204 = 0
let alternatif1205 = 0
let alternatif1206 = 0
let alternatif1207 = 0
```

```
let ahp01 = 0
let ahp02 = 0
let ahp03 = 0
let ahp04 = 0
let ahp05 = 0
let ahp06 = 0
let ahp07 = 0
```

```
subkriteria01 = kriteria[0]*subkriteria[0]
subkriteria02 = kriteria[0]*subkriteria[1]
subkriteria03 = kriteria[0]*subkriteria[2]
subkriteria04 = kriteria[1]*subkriteria[3]
subkriteria05 = kriteria[1]*subkriteria[4]
```



subkriteria06 = kriteria[1]\*subkriteria[5]  
subkriteria07 = kriteria[2]\*subkriteria[6]  
subkriteria08 = kriteria[2]\*subkriteria[7]  
subkriteria09 = kriteria[2]\*subkriteria[8]  
subkriteria10 = kriteria[3]\*subkriteria[9]  
subkriteria11 = kriteria[3]\*subkriteria[10]  
subkriteria12 = kriteria[3]\*subkriteria[11]

alternatif0101 = subkriteria01\*alternatifprd[0]  
alternatif0102 = subkriteria01\*alternatifprd[1]  
alternatif0103 = subkriteria01\*alternatifprd[2]  
alternatif0104 = subkriteria01\*alternatifprd[3]  
alternatif0105 = subkriteria01\*alternatifprd[4]  
alternatif0106 = subkriteria01\*alternatifprd[5]  
alternatif0107 = subkriteria01\*alternatifprd[6]  
alternatif0201 = subkriteria02\*alternatifprd[7]  
alternatif0202 = subkriteria02\*alternatifprd[8]  
alternatif0203 = subkriteria02\*alternatifprd[9]  
alternatif0204 = subkriteria02\*alternatifprd[10]  
alternatif0205 = subkriteria02\*alternatifprd[11]  
alternatif0206 = subkriteria02\*alternatifprd[12]  
alternatif0207 = subkriteria02\*alternatifprd[13]  
alternatif0301 = subkriteria03\*alternatifprd[14]  
alternatif0302 = subkriteria03\*alternatifprd[15]  
alternatif0303 = subkriteria03\*alternatifprd[16]  
alternatif0304 = subkriteria03\*alternatifprd[17]  
alternatif0305 = subkriteria03\*alternatifprd[18]  
alternatif0306 = subkriteria03\*alternatifprd[19]  
alternatif0307 = subkriteria03\*alternatifprd[20]  
alternatif0401 = subkriteria04\*alternatifprc[0]  
alternatif0402 = subkriteria04\*alternatifprc[1]  
alternatif0403 = subkriteria04\*alternatifprc[2]  
alternatif0404 = subkriteria04\*alternatifprc[3]  
alternatif0405 = subkriteria04\*alternatifprc[4]  
alternatif0406 = subkriteria04\*alternatifprc[5]  
alternatif0407 = subkriteria04\*alternatifprc[6]  
alternatif0501 = subkriteria05\*alternatifprc[7]  
alternatif0502 = subkriteria05\*alternatifprc[8]  
alternatif0503 = subkriteria05\*alternatifprc[9]  
alternatif0504 = subkriteria05\*alternatifprc[10]  
alternatif0505 = subkriteria05\*alternatifprc[11]  
alternatif0506 = subkriteria05\*alternatifprc[12]  
alternatif0507 = subkriteria05\*alternatifprc[13]  
alternatif0601 = subkriteria06\*alternatifprc[14]  
alternatif0602 = subkriteria06\*alternatifprc[15]  
alternatif0603 = subkriteria06\*alternatifprc[16]  
alternatif0604 = subkriteria06\*alternatifprc[17]  
alternatif0605 = subkriteria06\*alternatifprc[18]  
alternatif0606 = subkriteria06\*alternatifprc[19]  
alternatif0606 = subkriteria06\*alternatifprc[20]  
alternatif0701 = subkriteria07\*alternatifplc[0]  
alternatif0702 = subkriteria07\*alternatifplc[1]  
alternatif0703 = subkriteria07\*alternatifplc[2]  
alternatif0704 = subkriteria07\*alternatifplc[3]  
alternatif0705 = subkriteria07\*alternatifplc[4]  
alternatif0706 = subkriteria07\*alternatifplc[5]  
alternatif0707 = subkriteria07\*alternatifplc[6]  
alternatif0801 = subkriteria08\*alternatifplc[7]  
alternatif0802 = subkriteria08\*alternatifplc[8]

```

alternatif0803 = subkriteria08*alternatifplc[9]
alternatif0804 = subkriteria08*alternatifplc[10]
alternatif0805 = subkriteria08*alternatifplc[11]
alternatif0806 = subkriteria08*alternatifplc[12]
alternatif0807 = subkriteria08*alternatifplc[13]
alternatif0901 = subkriteria09*alternatifplc[14]
alternatif0902 = subkriteria09*alternatifplc[15]
alternatif0903 = subkriteria09*alternatifplc[16]
alternatif0904 = subkriteria09*alternatifplc[17]
alternatif0905 = subkriteria09*alternatifplc[18]
alternatif0906 = subkriteria09*alternatifplc[19]
alternatif0906 = subkriteria09*alternatifplc[20]
alternatif1001 = subkriteria10*alternatifprm[0]
alternatif1002 = subkriteria10*alternatifprm[1]
alternatif1003 = subkriteria10*alternatifprm[2]
alternatif1004 = subkriteria10*alternatifprm[3]
alternatif1005 = subkriteria10*alternatifprm[4]
alternatif1006 = subkriteria10*alternatifprm[5]
alternatif1007 = subkriteria10*alternatifprm[6]
alternatif1101 = subkriteria11*alternatifprm[7]
alternatif1102 = subkriteria11*alternatifprm[8]
alternatif1103 = subkriteria11*alternatifprm[9]
alternatif1104 = subkriteria11*alternatifprm[10]
alternatif1105 = subkriteria11*alternatifprm[11]
alternatif1106 = subkriteria11*alternatifprm[12]
alternatif1107 = subkriteria11*alternatifprm[13]
alternatif1201 = subkriteria12*alternatifprm[14]
alternatif1202 = subkriteria12*alternatifprm[15]
alternatif1203 = subkriteria12*alternatifprm[16]
alternatif1204 = subkriteria12*alternatifprm[17]
alternatif1205 = subkriteria12*alternatifprm[18]
alternatif1206 = subkriteria12*alternatifprm[19]
alternatif1207 = subkriteria12*alternatifprm[20]

```

```

ahp01 = sum(alternatif0101, alternatif0201, alternatif0301, alternatif0401,
alternatif0501, alternatif0601, alternatif0701, alternatif0801, alternatif0901,
alternatif1001, alternatif1101, alternatif1201)

```

```

ahp02 = sum(alternatif0102, alternatif0202, alternatif0302, alternatif0402,
alternatif0502, alternatif0602, alternatif0702, alternatif0802, alternatif0902,
alternatif1002, alternatif1102, alternatif1202)

```

```

ahp03 = sum(alternatif0103, alternatif0203, alternatif0303, alternatif0403,
alternatif0503, alternatif0603, alternatif0703, alternatif0803, alternatif0903,
alternatif1003, alternatif1103, alternatif1203)

```

```

ahp04 = sum(alternatif0104, alternatif0204, alternatif0304, alternatif0404,
alternatif0504, alternatif0604, alternatif0704, alternatif0804, alternatif0904,
alternatif1004, alternatif1104, alternatif1204)

```

```

ahp05 = sum(alternatif0105, alternatif0205, alternatif0305, alternatif0405,
alternatif0505, alternatif0605, alternatif0705, alternatif0805, alternatif0905,
alternatif1005, alternatif1105, alternatif1205)

```

```

ahp06 = sum(alternatif0106, alternatif0206, alternatif0306, alternatif0406,
alternatif0506, alternatif0606, alternatif0706, alternatif0806, alternatif0906,
alternatif1006, alternatif1106, alternatif1206)

```

```

ahp07 = sum(alternatif0107, alternatif0207, alternatif0307, alternatif0407,
alternatif0507, alternatif0607, alternatif0707, alternatif0807, alternatif0907,
alternatif1007, alternatif1107, alternatif1207)

```

```

const tablename01 = 'nilaisubkriteria'
const tablename02 = 'nilaialternatif'
const coloumname1 = 'nilaikriteria'

```

```

const coloumnname = 'ahp'
const coloumnname11 = 'subprd1'
const coloumnname12 = 'subprd2'
const coloumnname13 = 'subprd3'
const coloumnname21 = 'subprc1'
const coloumnname22 = 'subprc2'
const coloumnname23 = 'subprc3'
const coloumnname31 = 'subplc1'
const coloumnname32 = 'subplc2'
const coloumnname33 = 'subplc3'
const coloumnname41 = 'subprm1'
const coloumnname42 = 'subprm2'
const coloumnname43 = 'subprm3'
const idname01 = '5001'
const idname02 = '5002'
const idname03 = '5003'
const idname04 = '5007'
const idname05 = '5008'
const idname06 = '5009'
const idname07 = '5013'
const idname08 = '5014'
const idname09 = '5015'
const idname10 = '5019'
const idname11 = '5020'
const idname12 = '5021'
const idname1 = '7001'
const idname2 = '7002'
const idname3 = '7003'
const idname4 = '7004'
const idname5 = '7005'
const idname6 = '7006'
const idname7 = '7007'

```

```

Update(dbname, tablename01, coloumnname1, subkriteria01, idname01)
Update(dbname, tablename01, coloumnname1, subkriteria02, idname02)
Update(dbname, tablename01, coloumnname1, subkriteria03, idname03)
Update(dbname, tablename01, coloumnname1, subkriteria04, idname04)
Update(dbname, tablename01, coloumnname1, subkriteria05, idname05)
Update(dbname, tablename01, coloumnname1, subkriteria06, idname06)
Update(dbname, tablename01, coloumnname1, subkriteria07, idname07)
Update(dbname, tablename01, coloumnname1, subkriteria08, idname08)
Update(dbname, tablename01, coloumnname1, subkriteria09, idname09)
Update(dbname, tablename01, coloumnname1, subkriteria10, idname10)
Update(dbname, tablename01, coloumnname1, subkriteria11, idname11)
Update(dbname, tablename01, coloumnname1, subkriteria12, idname12)

```

```

Update(dbname, tablename02, coloumnname11, alternatif0101, idname1)
Update(dbname, tablename02, coloumnname11, alternatif0102, idname2)
Update(dbname, tablename02, coloumnname11, alternatif0103, idname3)
Update(dbname, tablename02, coloumnname11, alternatif0104, idname4)
Update(dbname, tablename02, coloumnname11, alternatif0105, idname5)
Update(dbname, tablename02, coloumnname11, alternatif0106, idname6)
Update(dbname, tablename02, coloumnname11, alternatif0107, idname7)
Update(dbname, tablename02, coloumnname12, alternatif0201, idname1)
Update(dbname, tablename02, coloumnname12, alternatif0202, idname2)
Update(dbname, tablename02, coloumnname12, alternatif0203, idname3)
Update(dbname, tablename02, coloumnname12, alternatif0204, idname4)
Update(dbname, tablename02, coloumnname12, alternatif0205, idname5)
Update(dbname, tablename02, coloumnname12, alternatif0206, idname6)

```



```

Update(dbname, tablename02, coloumnname42, alternatif1103, idname3)
Update(dbname, tablename02, coloumnname42, alternatif1104, idname4)
Update(dbname, tablename02, coloumnname42, alternatif1105, idname5)
Update(dbname, tablename02, coloumnname42, alternatif1106, idname6)
Update(dbname, tablename02, coloumnname42, alternatif1107, idname7)
Update(dbname, tablename02, coloumnname43, alternatif1201, idname1)
Update(dbname, tablename02, coloumnname43, alternatif1202, idname2)
Update(dbname, tablename02, coloumnname43, alternatif1203, idname3)
Update(dbname, tablename02, coloumnname43, alternatif1204, idname4)
Update(dbname, tablename02, coloumnname43, alternatif1205, idname5)
Update(dbname, tablename02, coloumnname43, alternatif1206, idname6)
Update(dbname, tablename02, coloumnname43, alternatif1207, idname7)

console.log(ahp01+space+ahp02+space+ahp03+space+ahp04+space+ahp05+space+ahp06+space+ahp07)

Update(dbname, tablename02, coloumnname, ahp01, table7row1)
Update(dbname, tablename02, coloumnname, ahp02, table7row2)
Update(dbname, tablename02, coloumnname, ahp03, table7row3)
Update(dbname, tablename02, coloumnname, ahp04, table7row4)
Update(dbname, tablename02, coloumnname, ahp05, table7row5)
Update(dbname, tablename02, coloumnname, ahp06, table7row6)
Update(dbname, tablename02, coloumnname, ahp07, table7row7)

console.log('Integrated')
}

export default Engine;

```

### LAMPIRAN 3

#### *Source code routes.ts (server)*

```
import * as express from 'express';
import * as bodyParser from 'body-parser';

import DB from './db';

const router = express();
router.use(bodyParser.json());

router.get('/api/indeks', async (req, res) => {
  try {
    let indeks = await DB.indeks.indeks();
    res.json(indeks);
  } catch (e) {
    console.log(e);
    res.sendStatus(500);
  }
});

router.get('/api/konsistensi', async (req, res) => {
  try {
    let konsistensi = await DB.konsistensi.konsistensi();
    res.json(konsistensi);
  } catch (e) {
    console.log(e);
    res.sendStatus(500);
  }
});

router.get('/api/nilaikriteria', async (req, res) => {
  try {
    let nilaikriteria = await DB.nilaikriteria.nilaikriteria();
    res.json(nilaikriteria);
  } catch (e) {
    console.log(e);
    res.sendStatus(500);
  }
});

router.get('/api/kriteria', async (req, res) => {
  try {
    let kriteria = await DB.nilaikriteria.kriteria();
    res.json(kriteria);
  } catch (e) {
    console.log(e);
    res.sendStatus(500);
  }
});

router.get('/api/nilaisubkriteria', async (req, res) => {
  try {
    let nilaisubkriteria = await DB.nilaisubkriteria.nilaisubkriteria();
    res.json(nilaisubkriteria);
  } catch (e) {
    console.log(e);
  }
});
```

```

        res.sendStatus(500);
    }
});

router.get('/api/subkriteria', async (req, res) => {
    try {
        let subkriteria = await DB.nilaisubkriteria.subkriteria();
        res.json(subkriteria);
    } catch (e) {
        console.log(e);
        res.sendStatus(500);
    }
});

router.get('/api/nilaialternatif', async (req, res) => {
    try {
        let nilaialternatif = await DB.nilaialternatif.nilaialternatif();
        res.json(nilaialternatif);
    } catch (e) {
        console.log(e);
        res.sendStatus(500);
    }
});

router.get('/api/alternatif', async (req, res) => {
    try {
        let alternatif = await DB.nilaialternatif.alternatif();
        res.json(alternatif);
    } catch (e) {
        console.log(e);
        res.sendStatus(500);
    }
});

router.post('/posts', async (req, res) => {
    try {
        console.log(req.body)
        let posts = await DB.post.post(req.body.dbname, req.body.tablename,
req.body.coloumnname, req.body.valuename ,req.body.idname);
        res.send(posts);
    } catch (e) {
        console.log(e);
        res.sendStatus(500);
    }
});

export default router;

```

#### LAMPIRAN 4

Hasil pengujian *black box* mengubah nilai kriteria yang ditampilkan oleh konsol:

```
Product Price ahpdatabase kriteria arah 'L' 4001
Product Price ahpdatabase kriteria nilai 1 4001
0.25 0.25 0.25 0.25 0 0
PIV: 4    N: 4    CI: 0    CR: 0    Status: 1
-----
0.33333291666674997 0.33333291666674997 0.33333291666674997 0 0 0
Integrated
reFetched
```

Hasil pengujian *black box* mengubah nilai subkriteria yang ditampilkan oleh konsol:

```
Product 1 Product 2 ahpdatabase subkriteria arah 'L' 6001
Product 1 Product 2 ahpdatabase subkriteria nilai 1 6001
0.3333333333333333 0.3333333333333333 0.3333333333333333 0 0 0
PIV: 3    N: 3    CI: 0    CR: 0    Status: 1
-----
0.333333 0.333333 0.333333 0 0 0
Integrated
reFetched
```

Hasil pengujian *black box* mengubah nilai alternatif yang ditampilkan oleh konsol:

```
Alternatif 1 Alternatif 2 ahpdatabase alternatif arah 'L' 8001
Alternatif 1 Alternatif 2 ahpdatabase alternatif nilai 1 8001
0.3333333333333333 0.3333333333333333 0.3333333333333333 0 0 0
PIV: 3    N: 3    CI: 0    CR: 0    Status: 1
-----
0.3333329444445 0.3333329444445 0.3333329444445 0 0 0
Integrated
reFetched
```



Hasil pengujian *black box* menambahkan subkriteria yang ditampilkan oleh konsol:

```
5009 => Price 3
0.3333333333333333 0.3333333333333333 0.3333333333333333 0 0 0
PIV: 3   N: 3   CI: 0   CR: 0   Status: 1
-----
0.33333291666674997 0.33333291666674997 0.33333291666674997 0 0 0
Integrated
reFetched
```

Hasil pengujian *black box* menambahkan alternatif yang ditampilkan oleh konsol:

```
7004 => Alternatif 4
0.25 0.25 0.25 0.25 0 0
PIV: 4   N: 4   CI: 0   CR: 0   Status: 1
-----
0.32638842361125 0.32638842361125 0.32638842361125 0.0208333125 0 0
Integrated
```

Hasil pengujian *black box* mengedit subkriteria yang ditampilkan oleh konsol:

```
Price 3 => Place 03
reFetched
```

Hasil pengujian *black box* mengedit alternatif yang ditampilkan oleh konsol:

```
Alternatif 4 => Alternatif 04
reFetched
```

Hasil pengujian *black box* menghapus subkriteria yang ditampilkan oleh konsol:

```
0.5 0.5 0 0 0 0
PIV: 2   N: 2   CI: 0   CR: 0   Status: 1
-----
0.2499999375 0.2499999375 0.2499999375 0.2499999375 0 0
Integrated
reFetched
```

Hasil pengujian *black box* menghapus alternatif yang ditampilkan oleh konsol:

```
0.3333333333333333 0.3333333333333333 0.3333333333333333 0 0 0
```

---

```
PIV: 3    N: 3    CI: 0    CR: 0    Status: 1
```

---

```
-----
```

---

```
0.256944375 0.256944375 0.256944375 0.229166625 0 0
```

---

```
Integrated
```

## LAMPIRAN 5

Metode pengujian *control flow analysis*:

Pada dokumentasi *TypeScript* yang berada pada alamat: <https://github.com/microsoft/TypeScript/blob/9c71eaf59040ae75343da8cdf01344020f5bba2/tests/baselines/reference/largeControlFlowGraph.errors.txt> dijelaskan bahwa *control flow analysis* akan memberikan pesan *error* saat *node* yang digunakan melebihi 10.000 pada suatu halaman kode. *Node* adalah model *non-blocking I/O* sehingga di dalam hal ini sebuah inisialisasi data maupun sebuah fungsi dapat menggunakan beberapa buah *node*.

Dengan melakukan percobaan menggunakan kode:

```
const data = []
data[0] = data [0]&&data[0].c
.
.
.
data[0] = data[0]&&data[0].c
```

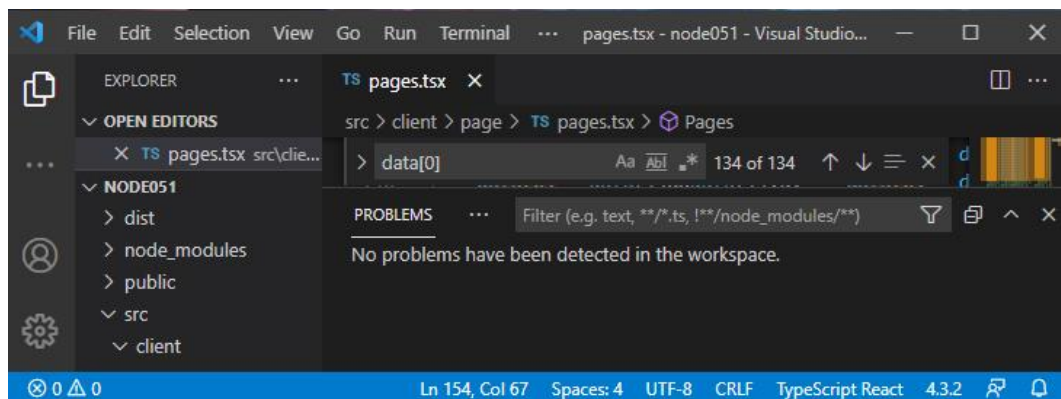
akan mengembalikan pesan *error* saat inisialisasi `data[0]` melebihi 10.000. Sehingga setiap inisialisasi `data[0]` menggunakan  $10.000/1.000 \approx 10$  *node*. Dengan mengetahui jumlah *node* dalam inisialisasi `data[0]` jumlah *node* maksimal yang telah digunakan di dalam suatu fungsi dapat dihitung dengan rumus:

$$10.000 - ( \text{Jumlah inisialisasi data[0] maksimal tanpa error} * 10 )$$

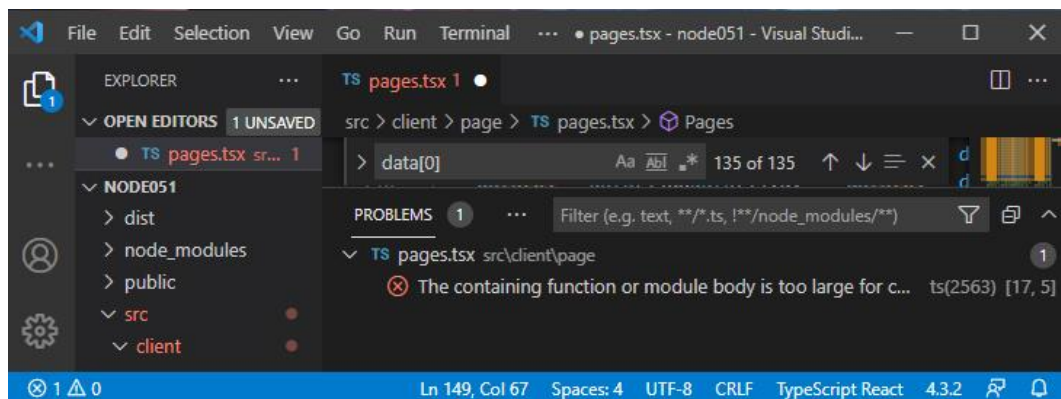
Contoh pengujian *control flow analysis*:

Dengan menggunakan kode dengan jumlah alternatif sebanyak 7 kemudian ditambahkan inisialisasi data[0] sedemikian sehingga didapatkan hasil sebagai berikut:

*Error* belum muncul pada saat jumlah data[0] sebanyak 134:



*Error* muncul pada saat jumlah data[0] sebanyak 135:



Dengan demikian jumlah *node* maksimal yang digunakan dalam kode dengan jumlah alternatif sebanyak 7 berjumlah:

$$\text{Node} = 10.000 - (134 * 10)$$

$$\text{Node} = 10.000 - 1.340$$

$$\text{Node} = 8.660$$

Sehingga didapatkan jumlah *node* maksimal sebanyak 8.660.

## LEMBAR PERBAIKAN SKRIPSI





### **“PENGAMBILAN KEPUTUSAN DALAM *SUPPLY CHAIN MANAGEMENT* TOKO MENGGUNAKAN *ANALYTICAL HIERARCHY PROCESS* DENGAN PENDEKATAN *MARKETING MIX*”**

**OLEH:**


**IRFAN ALAMSYAH  
D421 14 007**

Skripsi ini telah dipertahankan pada Ujian Akhir Sarjana tanggal 15 JULI 2021.  
Telah dilakukan perbaikan penulisan dan isi skripsi berdasarkan usulan dari penguji  
dan pembimbing skripsi.

Persetujuan perbaikan oleh tim penguji:

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Sekretaris	Elly Warni, S.T., M.T.	
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Pembimbing	Nama	Tanda Tangan
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