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LAMPIRAN

1. Hasil Ekstraksi Fitur GLCM

a. Arah 0°

contrast	dissimilarity	homogeneity	ASM	energy	correlation	result
5.78474399e+01	3.53110048e+00	4.19021136e-01	3.09365058e-03	5.56205949e-02	9.94577386e-01	non-covid
5.22782069e+01	3.73331059e+00	3.93353774e-01	4.23498504e-03	6.50767627e-02	9.95383887e-01	non-covid
7.19829047e+01	4.06658213e+00	3.88430243e-01	2.54453845e-03	5.04434183e-02	9.92829094e-01	non-covid
4.73554691e+01	3.52882716e+00	4.14146096e-01	2.37866537e-03	4.87715631e-02	9.94220909e-01	non-covid
6.32148746e+01	3.71439204e+00	4.16008573e-01	3.48167960e-03	5.90057591e-02	9.94355157e-01	non-covid
6.52845747e+01	3.73424062e+00	4.18816589e-01	3.65147462e-03	6.04274327e-02	9.94101842e-01	non-covid
6.40219455e+01	3.67834525e+00	4.18814963e-01	3.57056012e-03	5.97541640e-02	9.94035956e-01	non-covid
6.13606652e+01	3.67091483e+00	4.14571122e-01	3.41741234e-03	5.84586378e-02	9.94244866e-01	non-covid
5.70928518e+01	3.48205883e+00	4.29448673e-01	3.33883698e-03	5.77826702e-02	9.94713606e-01	non-covid
6.34559264e+01	3.69962625e+00	4.22862416e-01	3.94268716e-03	6.27908207e-02	9.94002971e-01	non-covid
7.09456443e+01	3.79359664e+00	4.17624765e-01	3.30771545e-03	5.75127416e-02	9.93197565e-01	non-covid
6.90206259e+01	3.77883656e+00	4.17772615e-01	3.38437132e-03	5.81753497e-02	9.93476911e-01	non-covid
6.33300944e+01	3.64321048e+00	4.17870715e-01	2.80455359e-03	5.29580361e-02	9.94085325e-01	non-covid
6.37136330e+01	3.68591072e+00	4.13894323e-01	2.83160332e-03	5.32128117e-02	9.94055643e-01	non-covid
6.88294635e+01	3.84452173e+00	4.10870461e-01	3.11272028e-03	5.57917582e-02	9.93457731e-01	non-covid
6.89337964e+01	3.83457395e+00	4.09630720e-01	3.15171679e-03	5.61401531e-02	9.93386713e-01	non-covid
6.58400806e+01	3.68491148e+00	4.17843689e-01	2.93929967e-03	5.42153085e-02	9.93507846e-01	non-covid
6.63793422e+01	3.69973164e+00	4.09748336e-01	2.92727051e-03	5.41042559e-02	9.93352529e-01	non-covid
6.36394970e+01	3.53445489e+00	4.12465303e-01	2.30205529e-03	4.79797383e-02	9.93772483e-01	non-covid
5.52882751e+01	3.95223207e+00	3.68727574e-01	3.95151258e-03	6.28610577e-02	9.93230210e-01	non-covid
5.49451316e+01	3.85537387e+00	3.80761698e-01	3.00952683e-03	5.48591544e-02	9.93291255e-01	non-covid
6.07789958e+01	4.04279392e+00	3.73143198e-01	3.52244654e-03	5.93502025e-02	9.92672356e-01	non-covid
5.96743493e+01	3.98395757e+00	3.74506047e-01	3.29794174e-03	5.74277088e-02	9.92751599e-01	non-covid
6.47700885e+01	4.22506841e+00	3.66799619e-01	2.90397544e-03	5.38885465e-02	9.91872855e-01	non-covid
6.23760231e+01	4.14950289e+00	3.68028624e-01	2.55284447e-03	5.05256812e-02	9.92201328e-01	non-covid
6.86770663e+01	4.32907629e+00	3.63662578e-01	2.37484372e-03	4.87323683e-02	9.91264783e-01	non-covid
6.38251897e+01	4.06824548e+00	3.76445774e-01	2.48401097e-03	4.98398532e-02	9.91979829e-01	non-covid
6.56334204e+01	4.13998054e+00	3.73042820e-01	2.20903793e-03	4.70004035e-02	9.91678165e-01	non-covid
6.20807732e+01	4.13540112e+00	3.65492951e-01	2.21414593e-03	4.70547121e-02	9.91918484e-01	non-covid
5.62450017e+01	3.88967574e+00	3.76739101e-01	2.26905296e-03	4.76345774e-02	9.92430966e-01	non-covid
5.80702032e+01	3.87427820e+00	3.83027991e-01	2.40652592e-03	4.90563546e-02	9.92273524e-01	non-covid
6.46390990e+01	4.18780154e+00	3.61941276e-01	1.81193080e-03	4.25667804e-02	9.91287165e-01	non-covid

5.24287646e+01	3.67417113e+00	3.88866765e-01	2.06725153e-03	4.54670379e-02	9.92510633e-01	non-covid
5.45897571e+01	3.71698866e+00	3.90416382e-01	2.03450218e-03	4.51054562e-02	9.91405084e-01	non-covid
4.89518242e+01	3.56724734e+00	4.10336016e-01	4.42932870e-03	6.65532021e-02	9.95124891e-01	non-covid
5.98331868e+01	3.68751035e+00	4.10842120e-01	4.01865556e-03	6.33928668e-02	9.94280977e-01	non-covid
6.06926331e+01	3.77135469e+00	4.09255977e-01	3.50562530e-03	5.92083212e-02	9.94001106e-01	non-covid
6.91074633e+01	4.03788281e+00	3.94393130e-01	3.32231400e-03	5.76395177e-02	9.93538700e-01	non-covid
8.15747049e+01	4.20396485e+00	3.95280463e-01	3.09739076e-03	5.56542070e-02	9.91805581e-01	non-covid
7.44689075e+01	4.16119364e+00	3.90766947e-01	2.84713959e-03	5.33585944e-02	9.92562197e-01	non-covid
7.36965754e+01	4.03552491e+00	3.95891597e-01	2.67839040e-03	5.17531680e-02	9.92771204e-01	non-covid
7.12254863e+01	3.93092269e+00	4.04443052e-01	2.82127609e-03	5.31156859e-02	9.93032415e-01	non-covid
6.48631037e+01	3.76840481e+00	4.00435122e-01	2.70145318e-03	5.19755056e-02	9.93352984e-01	non-covid
6.62644576e+01	3.88900171e+00	3.99501248e-01	2.66529434e-03	5.16264888e-02	9.93518281e-01	non-covid
6.92026817e+01	4.08135813e+00	3.74291262e-01	2.23837088e-03	4.73114244e-02	9.92982113e-01	non-covid
6.97302724e+01	3.87094574e+00	4.13090930e-01	2.40172493e-03	4.90073967e-02	9.93255827e-01	non-covid
6.59064735e+01	3.72391081e+00	4.17571414e-01	2.69470096e-03	5.19105092e-02	9.93628157e-01	non-covid
6.59972390e+01	3.79300103e+00	4.04862984e-01	2.75379128e-03	5.24765784e-02	9.93522942e-01	non-covid
5.79420874e+01	3.50529573e+00	4.21424367e-01	2.69568591e-03	5.19199952e-02	9.94433081e-01	non-covid
5.01896400e+01	3.66052092e+00	3.93090059e-01	4.07854918e-03	6.38635199e-02	9.94951574e-01	non-covid
4.80222266e+01	3.54836130e+00	4.08501619e-01	4.50636993e-03	6.71295012e-02	9.95161707e-01	non-covid
5.04810431e+01	3.60753759e+00	4.00144748e-01	3.56181776e-03	5.96809665e-02	9.95186534e-01	non-covid
6.88012406e+01	4.02655129e+00	3.97018829e-01	3.36342413e-03	5.79950354e-02	9.93578996e-01	non-covid
7.53304234e+01	4.21446525e+00	3.83972899e-01	2.92719285e-03	5.41035382e-02	9.92487084e-01	non-covid
7.01166588e+01	4.06607312e+00	3.85520264e-01	2.41829287e-03	4.91761412e-02	9.93007400e-01	non-covid
7.06743763e+01	3.94344145e+00	3.99987015e-01	2.61517123e-03	5.11387449e-02	9.93241950e-01	non-covid
6.69136379e+01	3.85192359e+00	3.97176932e-01	2.73339597e-03	5.22818895e-02	9.93284485e-01	non-covid
6.54392269e+01	3.76709169e+00	4.04444704e-01	2.55390369e-03	5.05361622e-02	9.93492682e-01	non-covid
6.91747699e+01	3.91091887e+00	4.02542942e-01	2.43244391e-03	4.93198125e-02	9.93091802e-01	non-covid
6.90862591e+01	3.87893156e+00	4.01199353e-01	2.78432737e-03	5.27667260e-02	9.93259991e-01	non-covid
6.09593173e+01	3.61615231e+00	4.18475802e-01	2.77705699e-03	5.26977892e-02	9.94095279e-01	non-covid
7.02736491e+01	3.88771733e+00	4.04603557e-01	2.75149834e-03	5.24547266e-02	9.93130224e-01	non-covid
6.68867046e+01	3.76254978e+00	4.17047900e-01	2.86701911e-03	5.35445525e-02	9.93596484e-01	non-covid
6.38697943e+01	3.52068221e+00	4.35361003e-01	2.67632413e-03	5.17332015e-02	9.94076655e-01	non-covid
6.38751978e+01	4.06755507e+00	3.71897600e-01	2.97828130e-03	5.45736319e-02	9.93827040e-01	non-covid
5.95685620e+01	3.94137462e+00	3.75117901e-01	2.94243803e-03	5.42442442e-02	9.94360079e-01	non-covid
6.57305120e+01	4.06168119e+00	3.77160736e-01	2.79112168e-03	5.28310674e-02	9.93773332e-01	non-covid
7.06382384e+01	4.29263782e+00	3.58484534e-01	2.39621777e-03	4.89511775e-02	9.93011459e-01	non-covid

7.93032179e+01	4.29814316e+00	3.76496292e-01	2.89541054e-03	5.38090191e-02	9.92493618e-01	non-covid
8.49280791e+01	4.49342121e+00	3.70488254e-01	2.53031040e-03	5.03021908e-02	9.91730812e-01	non-covid
7.56539043e+01	4.15798884e+00	3.90914072e-01	2.61121379e-03	5.11000371e-02	9.92586379e-01	non-covid
7.19558436e+01	3.88483118e+00	4.08482608e-01	2.65673925e-03	5.15435666e-02	9.93233900e-01	non-covid
7.28654607e+01	3.95243808e+00	4.06920576e-01	2.46704156e-03	4.96693221e-02	9.93038729e-01	non-covid
6.03064965e+01	4.08856337e+00	3.65359049e-01	5.50565320e-03	7.42000889e-02	9.92835921e-01	non-covid
5.78823116e+01	3.93500993e+00	3.73468930e-01	3.37437630e-03	5.80893820e-02	9.93195779e-01	non-covid
6.44756111e+01	4.15262126e+00	3.66921813e-01	4.04939941e-03	6.36348914e-02	9.92627533e-01	non-covid
6.32383312e+01	4.14599241e+00	3.60218914e-01	3.20813498e-03	5.66404006e-02	9.92682210e-01	non-covid
7.80102524e+01	4.51547689e+00	3.42050269e-01	2.04777178e-03	4.52523124e-02	9.90933539e-01	non-covid
7.35057040e+01	4.40361047e+00	3.51670909e-01	2.57092884e-03	5.07043277e-02	9.91351795e-01	non-covid
6.80486886e+01	4.28018381e+00	3.43342546e-01	1.76577665e-03	4.20211453e-02	9.91953366e-01	non-covid
6.60852356e+01	4.24764384e+00	3.57059475e-01	3.30364916e-03	5.74773795e-02	9.92468367e-01	non-covid
7.07790421e+01	4.32113904e+00	3.44780602e-01	1.84738316e-03	4.29811954e-02	9.91657134e-01	non-covid
8.04172632e+01	4.57702564e+00	3.44553722e-01	2.47533356e-03	4.97527241e-02	9.90642608e-01	non-covid
7.21294609e+01	4.42030519e+00	3.38540756e-01	1.69348072e-03	4.11519225e-02	9.91551640e-01	non-covid
7.69135294e+01	4.53075413e+00	3.38504890e-01	1.85050652e-03	4.30175142e-02	9.90878960e-01	non-covid
2.52735163e+02	6.47893211e+00	5.30608244e-01	1.70275669e-01	4.12644725e-01	9.78086970e-01	non-covid
3.14073487e+02	8.06608565e+00	4.19866564e-01	8.74524102e-02	2.95723537e-01	9.72220020e-01	non-covid
2.80152787e+02	7.29214771e+00	4.57893937e-01	1.08308519e-01	3.29102597e-01	9.76563922e-01	non-covid
2.68905887e+02	7.64255850e+00	4.07673914e-01	7.92855420e-02	2.81576885e-01	9.76304094e-01	non-covid
2.58323099e+02	7.27635490e+00	4.35000904e-01	9.65479049e-02	3.10721587e-01	9.77912156e-01	non-covid
2.64400978e+02	7.25809474e+00	4.24044293e-01	8.50690420e-02	2.91665977e-01	9.77135032e-01	non-covid
2.83562284e+02	7.68153330e+00	4.33856950e-01	9.59939922e-02	3.09828972e-01	9.75522531e-01	non-covid
2.98240007e+02	7.03079327e+00	4.94850709e-01	1.41084954e-01	3.75612771e-01	9.75948494e-01	non-covid
2.72522349e+02	7.00040918e+00	4.78670572e-01	1.23164712e-01	3.50948304e-01	9.77885590e-01	non-covid
3.01148589e+02	7.45824562e+00	4.57614159e-01	1.04616869e-01	3.23445310e-01	9.76062250e-01	non-covid
2.32641105e+02	6.31779941e+00	5.31122804e-01	1.78989190e-01	4.23071141e-01	9.79215468e-01	non-covid
2.10735578e+02	7.41419830e+00	2.46215265e-01	1.60569988e-03	4.00711851e-02	9.78277127e-01	non-covid
2.37339441e+02	8.11594653e+00	2.24333046e-01	1.16551149e-03	3.41395883e-02	9.74974053e-01	non-covid
1.94958375e+02	7.24198076e+00	2.42337715e-01	1.52117883e-03	3.90022926e-02	9.79703806e-01	non-covid
2.05417398e+02	7.15738340e+00	2.52942889e-01	1.56073611e-03	3.95061528e-02	9.79639061e-01	non-covid
1.85985527e+02	6.90928231e+00	2.55365994e-01	1.54778820e-03	3.93419395e-02	9.81068525e-01	non-covid
2.09049725e+02	7.46060529e+00	2.31461439e-01	1.23728381e-03	3.51750453e-02	9.78446159e-01	non-covid
2.14411718e+02	7.46144408e+00	2.39624696e-01	1.39690584e-03	3.73752036e-02	9.78317654e-01	non-covid
2.17210104e+02	7.58918735e+00	2.40171484e-01	1.35668442e-03	3.68331973e-02	9.77765325e-01	non-covid

2.25041660e+02	7.62337736e+00	2.29616828e-01	1.37714231e-03	3.71098681e-02	9.77605238e-01	non-covid
2.04255601e+02	7.15397384e+00	2.48213675e-01	1.45228557e-03	3.81088647e-02	9.79881195e-01	non-covid
2.02313764e+02	7.05511060e+00	2.50178654e-01	1.46452720e-03	3.82691417e-02	9.80148371e-01	non-covid
2.18482516e+02	7.31368097e+00	2.50336871e-01	1.15669884e-03	3.40102754e-02	9.78838151e-01	non-covid
2.14490784e+02	7.24739104e+00	2.52929673e-01	1.29825103e-03	3.60312507e-02	9.78321620e-01	non-covid
1.95204026e+02	6.72706802e+00	2.83610208e-01	1.51697073e-03	3.89483084e-02	9.81573398e-01	non-covid
1.86611944e+02	6.37879023e+00	3.07697201e-01	1.75043134e-03	4.18381565e-02	9.82049757e-01	non-covid
1.69075208e+02	6.30138003e+00	2.72444709e-01	1.38626817e-03	3.72326224e-02	9.83242216e-01	non-covid
4.26155471e+01	3.26797746e+00	4.27119533e-01	3.29770117e-03	5.74256142e-02	9.95306580e-01	non-covid
3.87819331e+01	3.11977236e+00	4.36191523e-01	3.35987533e-03	5.79644316e-02	9.95701889e-01	non-covid
4.08608668e+01	3.23749293e+00	4.25079449e-01	3.28072311e-03	5.72775970e-02	9.95567906e-01	non-covid
3.50226595e+01	2.92550446e+00	4.48181860e-01	3.70472326e-03	6.08664378e-02	9.96230088e-01	non-covid
3.51449928e+01	2.98417278e+00	4.37689506e-01	3.35866466e-03	5.79539875e-02	9.96136316e-01	non-covid
3.87154826e+01	3.09393893e+00	4.36568727e-01	3.49996295e-03	5.91604847e-02	9.95875030e-01	non-covid
4.19727302e+01	3.19261736e+00	4.35874808e-01	4.18078496e-03	6.46589898e-02	9.95602831e-01	non-covid
1.95779591e+02	6.43142036e+00	4.41190474e-01	7.75059162e-02	2.78398844e-01	9.85346818e-01	non-covid
2.26692383e+02	6.87085907e+00	4.08830295e-01	6.15038161e-02	2.47999629e-01	9.83254521e-01	non-covid
2.60328289e+02	8.16612667e+00	3.25746042e-01	2.87301985e-02	1.69499848e-01	9.79713677e-01	non-covid
3.06271198e+02	8.87141578e+00	3.11747234e-01	2.77023378e-02	1.66440193e-01	9.75968552e-01	non-covid
2.46865671e+02	7.52017243e+00	3.63276828e-01	3.53784837e-02	1.88091689e-01	9.81746970e-01	non-covid
2.58568932e+02	7.96352549e+00	3.39761881e-01	3.34617136e-02	1.82925432e-01	9.80359043e-01	non-covid
2.63796639e+02	7.87282482e+00	3.42061884e-01	3.57023157e-02	1.88950564e-01	9.79929841e-01	non-covid
2.53122265e+02	7.64862210e+00	3.63948188e-01	4.30586190e-02	2.07505708e-01	9.80929663e-01	non-covid
2.51853617e+02	7.32429496e+00	4.01572528e-01	6.09054802e-02	2.46790357e-01	9.81759562e-01	non-covid
6.67406273e+01	4.17523984e+00	3.66817427e-01	3.15844664e-03	5.62000591e-02	9.93119005e-01	non-covid
6.90236040e+01	4.15513663e+00	3.72786544e-01	3.50721933e-03	5.92217809e-02	9.93187847e-01	non-covid
7.09301954e+01	4.23972850e+00	3.63156295e-01	2.85965359e-03	5.34757290e-02	9.92910900e-01	non-covid
7.70809558e+01	4.41209279e+00	3.57299152e-01	2.25959139e-03	4.75351595e-02	9.91906161e-01	non-covid
6.86913561e+01	4.08675348e+00	3.85322509e-01	2.69279767e-03	5.18921735e-02	9.92795225e-01	non-covid
7.95201101e+01	4.43128862e+00	3.68782454e-01	2.74189221e-03	5.23630806e-02	9.91894503e-01	non-covid
7.59518761e+01	4.23876029e+00	3.81151023e-01	2.75975731e-03	5.25333923e-02	9.92208133e-01	non-covid
6.71384940e+01	3.88787688e+00	4.01421915e-01	2.40202313e-03	4.90104390e-02	9.92862634e-01	non-covid
7.45608094e+01	4.14540642e+00	3.89222705e-01	2.49980189e-03	4.99980189e-02	9.92126261e-01	non-covid
7.24984821e+01	4.06619517e+00	3.95630460e-01	2.10869781e-03	4.59205598e-02	9.92300855e-01	non-covid
7.72994912e+01	4.27942340e+00	3.80936750e-01	2.81564058e-03	5.30626100e-02	9.91777085e-01	non-covid
7.80803653e+01	4.30267693e+00	3.86911955e-01	2.06807846e-03	4.54761307e-02	9.91155701e-01	non-covid

7.64250438e+01	4.22461062e+00	3.97937576e-01	2.41632009e-03	4.91560789e-02	9.91139747e-01	non-covid
6.98892096e+01	4.05796607e+00	3.92351781e-01	2.32423347e-03	4.82103046e-02	9.92112164e-01	non-covid
7.28889320e+01	4.35573285e+00	3.68060180e-01	2.25248606e-03	4.74603630e-02	9.91713136e-01	non-covid
6.98371987e+01	4.08760329e+00	3.88085554e-01	2.35366300e-03	4.85145648e-02	9.92054288e-01	non-covid
6.85640578e+01	4.09497499e+00	3.86968365e-01	2.41120943e-03	4.91040673e-02	9.92216433e-01	non-covid
6.33231073e+01	3.88511415e+00	3.98762744e-01	2.33192487e-03	4.82900080e-02	9.92762149e-01	non-covid
6.72177070e+01	4.00875957e+00	3.83690434e-01	2.36636270e-03	4.86452742e-02	9.92642967e-01	non-covid
6.14080749e+01	4.42448806e+00	3.18934676e-01	1.47299760e-03	3.83796508e-02	9.92158576e-01	non-covid
6.36937581e+01	4.45324612e+00	3.29149253e-01	1.45595677e-03	3.81570016e-02	9.91982189e-01	non-covid
6.20152352e+01	4.40158183e+00	3.26501888e-01	1.38743424e-03	3.72482784e-02	9.92302769e-01	non-covid
6.87662590e+01	4.62228568e+00	3.20709134e-01	1.29119276e-03	3.59331707e-02	9.91433872e-01	non-covid
6.88088484e+01	4.43212524e+00	3.49731462e-01	1.85863350e-03	4.31118719e-02	9.91458305e-01	non-covid
6.79514280e+01	4.11696505e+00	3.83651186e-01	2.77312836e-03	5.26605010e-02	9.91469537e-01	non-covid
8.09110457e+01	4.66876202e+00	3.45269262e-01	1.83188585e-03	4.28005356e-02	9.90116926e-01	non-covid
7.93350888e+01	4.59801463e+00	3.56635805e-01	2.03072057e-03	4.50635170e-02	9.90042743e-01	non-covid
8.32488602e+01	4.81400455e+00	3.38156439e-01	1.71433682e-03	4.14045507e-02	9.89556544e-01	non-covid
6.41573884e+01	4.46736544e+00	3.26704999e-01	1.41819979e-03	3.76589935e-02	9.91951036e-01	non-covid
5.60025216e+01	4.10786330e+00	3.45351209e-01	1.67627039e-03	4.09422812e-02	9.92717246e-01	non-covid
6.52224654e+01	4.35232692e+00	3.45503019e-01	1.81026495e-03	4.25472085e-02	9.91694272e-01	non-covid
7.63316185e+01	4.52359945e+00	3.52582758e-01	2.00068303e-03	4.47289955e-02	9.90736024e-01	non-covid
7.30313978e+01	4.40352688e+00	3.68902685e-01	2.17013672e-03	4.65847263e-02	9.90936359e-01	non-covid
7.62162725e+01	4.52739034e+00	3.55225322e-01	1.86028972e-03	4.31310760e-02	9.90434487e-01	non-covid
7.90889519e+01	4.48084568e+00	3.72332277e-01	2.17412552e-03	4.66275189e-02	9.90188008e-01	non-covid
7.12212177e+01	4.19402374e+00	3.88746398e-01	2.48325427e-03	4.98322613e-02	9.90991299e-01	non-covid
7.31156131e+01	4.29937160e+00	3.79786123e-01	2.34946570e-03	4.84712874e-02	9.91018103e-01	non-covid
8.17067561e+01	4.50347740e+00	3.72121725e-01	2.07864218e-03	4.55921285e-02	9.90081748e-01	non-covid
7.53791792e+01	4.25200539e+00	3.97553890e-01	2.57652364e-03	5.07594685e-02	9.90434593e-01	non-covid
7.58812674e+01	4.33806209e+00	3.80311505e-01	2.34397932e-03	4.84146601e-02	9.90487082e-01	non-covid
7.00995862e+01	4.03799462e+00	4.11994725e-01	2.92372824e-03	5.40715105e-02	9.90897648e-01	non-covid
7.51017925e+01	4.21660638e+00	4.01396110e-01	2.77266489e-03	5.26561002e-02	9.90063640e-01	non-covid
8.68318433e+01	4.53009880e+00	3.60576488e-01	1.81360946e-03	4.25864939e-02	9.89905618e-01	non-covid
8.90397207e+01	4.61247243e+00	3.56658625e-01	1.80501583e-03	4.24854779e-02	9.89830228e-01	non-covid
8.09432133e+01	4.28122612e+00	3.93905245e-01	2.47029532e-03	4.97020655e-02	9.90434138e-01	non-covid
8.12404176e+01	4.33907692e+00	3.78609264e-01	2.20124695e-03	4.69174483e-02	9.90034080e-01	non-covid
7.09411030e+01	4.11692601e+00	3.87790239e-01	2.17907706e-03	4.66805855e-02	9.91012866e-01	non-covid
8.66566162e+01	4.37318411e+00	3.81798642e-01	2.74750127e-03	5.24166126e-02	9.90240216e-01	non-covid

8.90355245e+01	4.46986432e+00	3.80881305e-01	2.87743987e-03	5.36417736e-02	9.90038074e-01	non-covid
8.01855206e+01	4.13192929e+00	3.98703299e-01	2.44676037e-03	4.94647386e-02	9.90946427e-01	non-covid
9.07115887e+01	4.42646439e+00	3.90632222e-01	2.94687373e-03	5.42851152e-02	9.90030867e-01	non-covid
8.54782346e+01	4.27807379e+00	4.05054688e-01	2.82501968e-03	5.31509142e-02	9.90320176e-01	non-covid
8.72353692e+01	4.41587097e+00	3.97675058e-01	3.34353515e-03	5.78233098e-02	9.90250025e-01	non-covid
8.41385403e+01	4.27673919e+00	4.10323083e-01	3.38106543e-03	5.81469296e-02	9.90540990e-01	non-covid
8.26229174e+01	4.21660036e+00	4.20229730e-01	3.82081495e-03	6.18127410e-02	9.90466331e-01	non-covid
8.83888865e+01	4.34519143e+00	4.18645335e-01	3.47766712e-03	5.89717485e-02	9.89981446e-01	non-covid
8.66841358e+01	4.36958788e+00	4.10715579e-01	3.55342300e-03	5.96105947e-02	9.90354052e-01	non-covid
9.19251947e+01	4.46800845e+00	4.08023754e-01	3.66312861e-03	6.05237855e-02	9.89503333e-01	non-covid
7.73011480e+01	4.09844519e+00	4.01112010e-01	3.29057320e-03	5.73635180e-02	9.91449486e-01	non-covid
7.47889983e+01	4.05746521e+00	4.06884373e-01	3.73886019e-03	6.11462198e-02	9.91614377e-01	non-covid
8.52754997e+01	4.35073775e+00	3.94227451e-01	3.29773489e-03	5.74259078e-02	9.90608032e-01	non-covid
8.15668049e+01	4.28777191e+00	4.04252742e-01	3.91382775e-03	6.25605926e-02	9.90957956e-01	non-covid
8.20838773e+01	4.32430631e+00	3.93314544e-01	3.07140921e-03	5.54202960e-02	9.90820452e-01	non-covid
8.36908071e+01	4.37990001e+00	3.91181762e-01	3.18348428e-03	5.64223740e-02	9.90615481e-01	non-covid
7.44582152e+01	4.08909132e+00	4.15428762e-01	2.61497550e-03	5.11368312e-02	9.91789816e-01	non-covid
7.93771374e+01	4.24332379e+00	3.97103829e-01	2.53531395e-03	5.03519011e-02	9.91058528e-01	non-covid
7.63789389e+01	4.13685023e+00	4.16386447e-01	2.74266977e-03	5.23705047e-02	9.91748192e-01	non-covid
1.94704640e+02	5.59645629e+00	5.49785264e-01	1.66772478e-01	4.08377862e-01	9.84100771e-01	non-covid
2.75073090e+02	7.42393048e+00	4.16463763e-01	7.32046566e-02	2.70563591e-01	9.77596647e-01	non-covid
2.20356941e+02	6.23158023e+00	4.94838934e-01	1.16657446e-01	3.41551527e-01	9.82273404e-01	non-covid
2.76847392e+02	7.26652542e+00	4.37930413e-01	7.82962294e-02	2.79814634e-01	9.77690605e-01	non-covid
3.05759576e+02	7.82403412e+00	4.00503770e-01	6.21360857e-02	2.49271109e-01	9.74943564e-01	non-covid
2.61829633e+02	1.07033787e+01	1.26058586e-01	3.64088704e-04	1.90811086e-02	9.58007366e-01	covid
3.56440846e+02	1.07202097e+01	1.66578018e-01	2.55400853e-03	5.05371994e-02	9.69821381e-01	covid
2.51886920e+02	1.02408658e+01	1.38778078e-01	9.70942377e-04	3.11599483e-02	9.67295808e-01	covid
1.70185136e+02	6.33827900e+00	4.03298514e-01	4.09247163e-02	2.02298582e-01	9.83985334e-01	covid
2.52104339e+02	1.04592977e+01	1.29100205e-01	4.04723105e-04	2.01177311e-02	9.57546384e-01	covid
3.18180557e+02	1.17605128e+01	1.17653034e-01	3.87110503e-04	1.96751240e-02	9.45806303e-01	covid
2.99364954e+02	1.15464726e+01	1.16831756e-01	3.78909340e-04	1.94655938e-02	9.48990658e-01	covid
2.63284027e+02	1.10329730e+01	1.19009329e-01	3.86440927e-04	1.96581008e-02	9.53609970e-01	covid
2.41351379e+02	1.05958536e+01	1.23131281e-01	3.98408269e-04	1.99601671e-02	9.52971306e-01	covid
2.70186384e+02	1.11654245e+01	1.17045210e-01	3.48115002e-04	1.86578402e-02	9.48809803e-01	covid
2.69328433e+02	1.10855208e+01	1.20809332e-01	4.44702910e-04	2.10879802e-02	9.52261476e-01	covid
2.82438725e+02	1.13739957e+01	1.14139335e-01	3.50952426e-04	1.87337243e-02	9.43080647e-01	covid

2.60338839e+02	1.09528940e+01	1.18736430e-01	3.55801962e-04	1.88627135e-02	9.47833667e-01	covid
2.85187466e+02	1.11868450e+01	1.21735465e-01	3.89134690e-04	1.97264972e-02	9.49374562e-01	covid
3.12035659e+02	1.16255252e+01	1.19327647e-01	4.00236654e-04	2.00059155e-02	9.45969663e-01	covid
2.83695274e+02	1.11039178e+01	1.22746277e-01	3.84371705e-04	1.96053999e-02	9.52102478e-01	covid
2.44804311e+02	1.03164632e+01	1.29895442e-01	3.86471587e-04	1.96588806e-02	9.57737631e-01	covid
2.51987107e+02	1.07447231e+01	1.21757459e-01	3.91231390e-04	1.97795700e-02	9.53413507e-01	covid
2.42119377e+02	1.05941575e+01	1.23800150e-01	4.03853911e-04	2.00961168e-02	9.53415130e-01	covid
2.60737208e+02	1.09363379e+01	1.19289066e-01	3.53692278e-04	1.88067083e-02	9.48416308e-01	covid
2.71652739e+02	1.11439665e+01	1.15259542e-01	3.50734582e-04	1.87279092e-02	9.42141113e-01	covid
2.83486997e+02	1.13977191e+01	1.16882682e-01	3.98015029e-04	1.99503140e-02	9.48053362e-01	covid
2.72558074e+02	1.11740478e+01	1.19649494e-01	4.43281737e-04	2.10542570e-02	9.51804390e-01	covid
2.38614465e+02	1.03842361e+01	1.26766284e-01	4.53507544e-04	2.12957166e-02	9.54756037e-01	covid
2.31633358e+02	1.02446851e+01	1.26652830e-01	4.02294810e-04	2.00572882e-02	9.56610860e-01	covid
2.44266475e+02	1.05220965e+01	1.26016501e-01	4.24542495e-04	2.06044290e-02	9.56463750e-01	covid
2.45347478e+02	1.05280236e+01	1.26223890e-01	4.64790687e-04	2.15590048e-02	9.55130204e-01	covid
2.34240305e+02	1.02036138e+01	1.30298077e-01	3.83514657e-04	1.95835303e-02	9.61340122e-01	covid
2.44712116e+02	1.02416255e+01	1.32574391e-01	4.08839155e-04	2.02197714e-02	9.60504578e-01	covid
2.80887854e+02	1.10538302e+01	1.24181311e-01	3.69103728e-04	1.92120724e-02	9.59077804e-01	covid
2.57006636e+02	1.05168617e+01	1.30781016e-01	3.81758948e-04	1.95386527e-02	9.62496581e-01	covid
2.36828927e+02	1.00119670e+01	1.40094512e-01	4.10815326e-04	2.02685798e-02	9.65229292e-01	covid
2.35406342e+02	1.00362934e+01	1.40274764e-01	4.08208025e-04	2.02041586e-02	9.67365711e-01	covid
2.46849175e+02	1.02769096e+01	1.37475541e-01	3.91499108e-04	1.97863364e-02	9.66293312e-01	covid
2.68142465e+02	1.05697888e+01	1.33689651e-01	3.50551993e-04	1.87230337e-02	9.61479483e-01	covid
2.68132448e+02	1.04424546e+01	1.36241029e-01	3.77188994e-04	1.94213541e-02	9.60135254e-01	covid
2.57756030e+02	1.02106631e+01	1.42492328e-01	4.10589546e-04	2.02630093e-02	9.62316741e-01	covid
2.51925495e+02	1.01467775e+01	1.47896175e-01	4.51369031e-04	2.12454473e-02	9.63470859e-01	covid
2.52520933e+02	1.01229865e+01	1.49994280e-01	4.59861423e-04	2.14443797e-02	9.64050550e-01	covid
2.87991084e+02	1.05980068e+01	1.47960202e-01	5.06973433e-04	2.25160705e-02	9.60907532e-01	covid
2.85942004e+02	1.04915011e+01	1.51211365e-01	5.34435414e-04	2.31178592e-02	9.61326092e-01	covid
2.89002144e+02	1.05291878e+01	1.49420131e-01	5.00049693e-04	2.23617909e-02	9.62131853e-01	covid
2.41194991e+02	9.63579612e+00	1.58262417e-01	5.16987530e-04	2.27373598e-02	9.67648138e-01	covid
2.27057472e+02	9.46158204e+00	1.58247538e-01	4.56244085e-04	2.13598709e-02	9.69684635e-01	covid
2.39245331e+02	9.59988883e+00	1.60816353e-01	4.48039350e-04	2.11669400e-02	9.68592698e-01	covid
2.86854080e+02	1.05244678e+01	1.45067153e-01	4.38107625e-04	2.09310206e-02	9.63945638e-01	covid
3.08987359e+02	1.08746502e+01	1.46564710e-01	5.02928829e-04	2.24260748e-02	9.61996271e-01	covid
2.64300951e+02	9.97632164e+00	1.55410826e-01	5.14475756e-04	2.26820580e-02	9.66445710e-01	covid

2.38584620e+02	9.48110112e+00	1.65227236e-01	6.95496495e-04	2.63722675e-02	9.70159020e-01	covid
2.26230497e+02	9.42147636e+00	1.61844691e-01	6.93090218e-04	2.63266066e-02	9.71474926e-01	covid
2.14969099e+02	9.18923476e+00	1.65243230e-01	7.06745260e-04	2.65846809e-02	9.72141236e-01	covid
2.40288564e+02	9.61020530e+00	1.62341046e-01	8.12635295e-04	2.85067588e-02	9.69902487e-01	covid
2.29101035e+02	9.45060712e+00	1.57987787e-01	7.53095838e-04	2.74425917e-02	9.70238975e-01	covid
1.97068282e+02	8.92799226e+00	1.65946682e-01	8.65983893e-04	2.94276043e-02	9.73615138e-01	covid
2.08055580e+02	9.49738448e+00	1.56832165e-01	9.53356487e-04	3.08764714e-02	9.73365478e-01	covid
1.93082451e+02	9.02284084e+00	1.64029690e-01	1.10219965e-03	3.31993923e-02	9.72519964e-01	covid
2.07856804e+02	9.40447321e+00	1.61566255e-01	1.18705530e-03	3.44536689e-02	9.72294847e-01	covid
2.23893264e+02	9.48649396e+00	1.70095525e-01	1.58750723e-03	3.98435343e-02	9.68984525e-01	covid
2.15795829e+02	9.37445201e+00	1.66636587e-01	1.82512990e-03	4.27215391e-02	9.70261112e-01	covid
1.94249264e+02	9.13214973e+00	1.64144801e-01	1.59085464e-03	3.98855192e-02	9.70874658e-01	covid
1.98477421e+02	9.48156787e+00	1.51447752e-01	1.34879237e-03	3.67259088e-02	9.68644089e-01	covid
1.93655813e+02	9.31480898e+00	1.57565256e-01	1.59999555e-03	3.99999443e-02	9.69124833e-01	covid

b. Arah 45°

contrast	dissimilarity	homogeneity	ASM	energy	correlation	result
1.05639768e+02	4.93060361e+00	3.28897433e-01	2.21336785e-03	4.70464435e-02	9.90066751e-01	non-covid
9.90894052e+01	5.15820998e+00	3.16567357e-01	3.16680702e-03	5.62743904e-02	9.91246705e-01	non-covid
1.36303322e+02	5.64399547e+00	3.11042330e-01	1.88289574e-03	4.33923466e-02	9.86392736e-01	non-covid
8.24230417e+01	4.79484799e+00	3.23991202e-01	1.53931884e-03	3.92341540e-02	9.89938392e-01	non-covid
1.20351202e+02	5.19783151e+00	3.25671622e-01	2.43638706e-03	4.93597716e-02	9.89237248e-01	non-covid
1.21538256e+02	5.16300288e+00	3.32450185e-01	2.61380201e-03	5.11253559e-02	9.89000499e-01	non-covid
1.16317130e+02	5.11771338e+00	3.31509970e-01	2.55974793e-03	5.05939515e-02	9.89139219e-01	non-covid
1.24546990e+02	5.28733990e+00	3.21782343e-01	2.42151769e-03	4.92089188e-02	9.88299296e-01	non-covid
1.22310239e+02	5.16038219e+00	3.32672933e-01	2.34050757e-03	4.83787926e-02	9.88670455e-01	non-covid
1.28648568e+02	5.30685789e+00	3.37898314e-01	2.91401413e-03	5.39816092e-02	9.87817322e-01	non-covid
1.29238874e+02	5.35441606e+00	3.24149851e-01	2.37433667e-03	4.87271656e-02	9.87587941e-01	non-covid
1.34270078e+02	5.39313045e+00	3.24665163e-01	2.38827544e-03	4.88699851e-02	9.87291662e-01	non-covid
1.21690398e+02	5.13370519e+00	3.27698621e-01	2.01225674e-03	4.48581847e-02	9.88633215e-01	non-covid
1.22871159e+02	5.21219149e+00	3.26366450e-01	2.01610182e-03	4.49010225e-02	9.88531621e-01	non-covid
1.31819374e+02	5.41277287e+00	3.26940095e-01	2.25736971e-03	4.75117850e-02	9.87455129e-01	non-covid
1.28698798e+02	5.35727881e+00	3.25202194e-01	2.28444993e-03	4.77959196e-02	9.87634861e-01	non-covid
1.19865080e+02	5.11152045e+00	3.33364775e-01	2.15106866e-03	4.63796147e-02	9.88163961e-01	non-covid
1.16355647e+02	5.01709653e+00	3.28273266e-01	2.13759018e-03	4.62340802e-02	9.88332260e-01	non-covid
1.09189578e+02	4.85744814e+00	3.22841531e-01	1.64272931e-03	4.05305972e-02	9.89305999e-01	non-covid
9.82756387e+01	5.53877451e+00	2.73513768e-01	2.82838427e-03	5.31825561e-02	9.87979125e-01	non-covid

1.01196894e+02	5.50454002e+00	2.77437232e-01	2.07556119e-03	4.55583274e-02	9.87649874e-01		non-covid
1.06939150e+02	5.65309698e+00	2.72842920e-01	2.49711503e-03	4.99711420e-02	9.87099867e-01		non-covid
9.98727143e+01	5.43414427e+00	2.79284432e-01	2.41465991e-03	4.91391892e-02	9.87866227e-01		non-covid
1.04668576e+02	5.57500000e+00	2.84399175e-01	2.15893543e-03	4.64643458e-02	9.86853744e-01		non-covid
1.08445365e+02	5.65835597e+00	2.77705485e-01	1.78277401e-03	4.22229086e-02	9.86431354e-01		non-covid
1.20917602e+02	5.91119086e+00	2.72479672e-01	1.66695340e-03	4.08283407e-02	9.84602853e-01		non-covid
1.08669693e+02	5.48592284e+00	2.85447927e-01	1.74211835e-03	4.17386913e-02	9.86343081e-01		non-covid
1.05300946e+02	5.42451434e+00	2.91184499e-01	1.63907845e-03	4.04855338e-02	9.86646236e-01		non-covid
1.12966036e+02	5.71032919e+00	2.80223056e-01	1.57672503e-03	3.97079971e-02	9.85293316e-01		non-covid
1.01206024e+02	5.31499461e+00	2.95899484e-01	1.63649736e-03	4.04536446e-02	9.86393418e-01		non-covid
1.03283658e+02	5.26703200e+00	2.97921916e-01	1.72882373e-03	4.15791261e-02	9.86270035e-01		non-covid
1.26074111e+02	5.91336634e+00	2.73773479e-01	1.26687010e-03	3.55931187e-02	9.83010409e-01		non-covid
9.33831193e+01	5.18330515e+00	2.78435978e-01	1.34633392e-03	3.66924231e-02	9.86680339e-01		non-covid
8.98272065e+01	5.13443302e+00	2.74763548e-01	1.27307745e-03	3.56802109e-02	9.85882737e-01		non-covid
8.23271238e+01	4.69787147e+00	3.27469194e-01	3.42508046e-03	5.85241870e-02	9.91811448e-01		non-covid
9.75439705e+01	4.83609242e+00	3.31325004e-01	3.06056358e-03	5.53223606e-02	9.90663192e-01		non-covid
1.02760001e+02	5.02282515e+00	3.23074217e-01	2.56477594e-03	5.06436170e-02	9.89826390e-01		non-covid
1.15477264e+02	5.28321932e+00	3.17593510e-01	2.52065370e-03	5.02061122e-02	9.89197776e-01		non-covid
1.45769444e+02	5.68542770e+00	3.17219884e-01	2.31749359e-03	4.81403530e-02	9.85340340e-01		non-covid
1.36903136e+02	5.61465768e+00	3.12558475e-01	2.09828881e-03	4.58070825e-02	9.86310978e-01		non-covid
1.39892741e+02	5.65023131e+00	3.13751127e-01	1.99201379e-03	4.46319817e-02	9.86268837e-01		non-covid
1.41162559e+02	5.65029404e+00	3.19324556e-01	2.06552818e-03	4.54480823e-02	9.86184176e-01		non-covid
1.27791909e+02	5.36898828e+00	3.07607575e-01	1.92931090e-03	4.39239218e-02	9.86891245e-01		non-covid
1.40764153e+02	5.59566199e+00	3.13799233e-01	1.93006168e-03	4.39324672e-02	9.86224901e-01		non-covid
1.33479047e+02	5.69678697e+00	2.91595669e-01	1.61979884e-03	4.02467246e-02	9.86450374e-01		non-covid
1.22097842e+02	5.16492099e+00	3.22241042e-01	1.71401821e-03	4.14007030e-02	9.88188533e-01		non-covid
1.10491362e+02	4.88674033e+00	3.33632060e-01	1.97524287e-03	4.44437045e-02	9.89311434e-01		non-covid
1.13426822e+02	5.04209325e+00	3.23190594e-01	2.06547552e-03	4.54475029e-02	9.88866735e-01		non-covid
1.03354631e+02	4.74598500e+00	3.30906518e-01	1.95918319e-03	4.42626614e-02	9.90064259e-01		non-covid
7.94711029e+01	4.65783088e+00	3.18409556e-01	3.19849562e-03	5.65552440e-02	9.92017219e-01		non-covid
8.04993027e+01	4.65307422e+00	3.27663510e-01	3.52808081e-03	5.93976499e-02	9.91899851e-01		non-covid
8.63430039e+01	4.75023343e+00	3.13935360e-01	2.60957996e-03	5.10840480e-02	9.91769874e-01		non-covid
1.23296464e+02	5.33447001e+00	3.16869472e-01	2.46770439e-03	4.96759941e-02	9.88480748e-01		non-covid
1.37171659e+02	5.64944571e+00	3.09943834e-01	2.18161567e-03	4.67077688e-02	9.86299777e-01		non-covid
1.29487815e+02	5.56262602e+00	3.06565922e-01	1.76222974e-03	4.19789202e-02	9.87075166e-01		non-covid
1.33039594e+02	5.45958688e+00	3.19304022e-01	1.96079951e-03	4.42809159e-02	9.87275277e-01		non-covid
1.33177271e+02	5.50571376e+00	3.09080727e-01	1.97085780e-03	4.43943442e-02	9.86622952e-01		non-covid
1.26635484e+02	5.27995991e+00	3.15421226e-01	1.83553323e-03	4.28431235e-02	9.87400817e-01		non-covid
1.29447690e+02	5.43793292e+00	3.21676777e-01	1.77679459e-03	4.21520413e-02	9.87062948e-01		non-covid

1.29342776e+02	5.33215221e+00	3.17872598e-01	2.07737022e-03	4.55781770e-02	9.87371471e-01	non-covid
1.13678769e+02	4.93887203e+00	3.29606099e-01	2.02759816e-03	4.50288591e-02	9.88983659e-01	non-covid
1.18920901e+02	5.11129557e+00	3.25583468e-01	2.03343210e-03	4.50935926e-02	9.88368685e-01	non-covid
1.10308898e+02	4.86595658e+00	3.35996617e-01	2.10366981e-03	4.58657804e-02	9.89433331e-01	non-covid
1.05541173e+02	4.62438710e+00	3.47567574e-01	1.88881512e-03	4.34605007e-02	9.90209463e-01	non-covid
1.02992473e+02	5.33294233e+00	2.90871396e-01	2.26782767e-03	4.76217143e-02	9.90049128e-01	non-covid
1.01826473e+02	5.16326056e+00	2.97386820e-01	2.21213699e-03	4.70333604e-02	9.90361934e-01	non-covid
1.11333243e+02	5.27044025e+00	3.05189872e-01	2.13877430e-03	4.62468842e-02	9.89450348e-01	non-covid
1.19018482e+02	5.57565415e+00	2.91563993e-01	1.81413536e-03	4.25926679e-02	9.88205437e-01	non-covid
1.24859012e+02	5.50014187e+00	3.05915860e-01	2.17405905e-03	4.66268062e-02	9.88168446e-01	non-covid
1.33662501e+02	5.79588615e+00	2.98677205e-01	1.88101609e-03	4.33706823e-02	9.86972678e-01	non-covid
1.40747686e+02	5.75560074e+00	3.08980495e-01	1.88863071e-03	4.34583790e-02	9.86197541e-01	non-covid
1.26691427e+02	5.34206934e+00	3.22077396e-01	1.90775995e-03	4.36779115e-02	9.88086550e-01	non-covid
1.33373158e+02	5.51412748e+00	3.16506548e-01	1.72957226e-03	4.15881265e-02	9.87256719e-01	non-covid
1.16654692e+02	5.71718462e+00	2.77548151e-01	4.07454962e-03	6.38321989e-02	9.86165556e-01	non-covid
1.08438553e+02	5.60695676e+00	2.67768222e-01	2.32456290e-03	4.82137211e-02	9.87264604e-01	non-covid
1.21044818e+02	5.85805473e+00	2.72728219e-01	2.80504101e-03	5.29626379e-02	9.86171734e-01	non-covid
1.24226451e+02	6.08204444e+00	2.51768009e-01	2.20180035e-03	4.69233455e-02	9.85637409e-01	non-covid
1.32906711e+02	6.16872103e+00	2.58632233e-01	1.51673304e-03	3.89452570e-02	9.84549436e-01	non-covid
1.35579171e+02	6.14597533e+00	2.62102523e-01	1.86548625e-03	4.31912751e-02	9.84063854e-01	non-covid
1.40972160e+02	6.44568823e+00	2.41681258e-01	1.20942306e-03	3.47767603e-02	9.83344493e-01	non-covid
1.29712564e+02	6.21087423e+00	2.51076386e-01	2.27406497e-03	4.76871573e-02	9.85228615e-01	non-covid
1.20992962e+02	5.94413999e+00	2.54301674e-01	1.35773328e-03	3.68474324e-02	9.85746968e-01	non-covid
1.41366775e+02	6.26130081e+00	2.61768208e-01	1.82880942e-03	4.27645814e-02	9.83558983e-01	non-covid
1.50390273e+02	6.70698194e+00	2.34606495e-01	1.12986687e-03	3.36134924e-02	9.82391345e-01	non-covid
1.41563316e+02	6.38884576e+00	2.52372833e-01	1.32042874e-03	3.63377042e-02	9.83227890e-01	non-covid
3.95070092e+02	8.30115910e+00	5.02971519e-01	1.62940437e-01	4.03658813e-01	9.65750931e-01	non-covid
4.97279878e+02	1.03796059e+01	3.89639876e-01	8.19386122e-02	2.86249214e-01	9.55943861e-01	non-covid
4.88587294e+02	9.83937600e+00	4.22164575e-01	1.01261945e-01	3.18216821e-01	9.59089519e-01	non-covid
4.97832490e+02	1.05268187e+01	3.70028308e-01	7.33194923e-02	2.70775723e-01	9.56041758e-01	non-covid
4.65256735e+02	9.82083626e+00	4.01798754e-01	9.06121215e-02	3.01018474e-01	9.60159488e-01	non-covid
4.84296611e+02	9.91238808e+00	3.86546597e-01	7.90681271e-02	2.81190553e-01	9.58040054e-01	non-covid
5.14604044e+02	1.04406410e+01	4.02188404e-01	9.05377636e-02	3.00894938e-01	9.55540298e-01	non-covid
5.09896642e+02	9.25447085e+00	4.67398538e-01	1.34854110e-01	3.67224877e-01	9.58855931e-01	non-covid
5.08571131e+02	9.58896565e+00	4.45013003e-01	1.17493753e-01	3.42773618e-01	9.58696583e-01	non-covid
5.10557380e+02	9.65948386e+00	4.29224900e-01	9.97220379e-02	3.15787964e-01	9.59374169e-01	non-covid
3.77666185e+02	8.23859111e+00	5.03939804e-01	1.70113371e-01	4.12448022e-01	9.66277257e-01	non-covid
3.46755670e+02	9.76752152e+00	1.86286832e-01	1.18329730e-03	3.43990887e-02	9.64215840e-01	non-covid
3.80362750e+02	1.03794661e+01	1.77998135e-01	9.25345931e-04	3.04194992e-02	9.59818146e-01	non-covid

3.85896052e+02	1.03197952e+01	1.76693472e-01	1.11011328e-03	3.33183625e-02	9.59756162e-01	non-covid
3.89806869e+02	1.00935867e+01	1.87654894e-01	1.13089502e-03	3.36287826e-02	9.61341177e-01	non-covid
3.66446353e+02	9.78260004e+00	1.88491598e-01	1.15896203e-03	3.40435313e-02	9.62639416e-01	non-covid
3.94877575e+02	1.01724750e+01	1.79140254e-01	9.19075369e-04	3.03162559e-02	9.59231916e-01	non-covid
3.97524055e+02	1.03486477e+01	1.76852202e-01	1.06820080e-03	3.26833413e-02	9.59774808e-01	non-covid
3.70802220e+02	1.01839351e+01	1.78079521e-01	1.03257514e-03	3.21337072e-02	9.62023204e-01	non-covid
3.85888153e+02	9.99546402e+00	1.80704312e-01	1.07762833e-03	3.28272499e-02	9.61571951e-01	non-covid
3.72282581e+02	9.79130253e+00	1.83808340e-01	1.07764434e-03	3.28274937e-02	9.63307234e-01	non-covid
3.65351497e+02	9.60618820e+00	1.88196758e-01	1.10909902e-03	3.33031383e-02	9.64136204e-01	non-covid
4.03305410e+02	9.90298437e+00	1.89008313e-01	8.65329219e-04	2.94164787e-02	9.60901687e-01	non-covid
3.70627229e+02	9.63314581e+00	1.92679438e-01	9.90415859e-04	3.14708732e-02	9.62495663e-01	non-covid
3.78954301e+02	9.26033178e+00	2.20660639e-01	1.13706943e-03	3.37204601e-02	9.64197039e-01	non-covid
3.49630272e+02	8.93025616e+00	2.25499606e-01	1.21464113e-03	3.48517020e-02	9.66337685e-01	non-covid
3.19728024e+02	8.86297866e+00	1.94806344e-01	9.62920523e-04	3.10309607e-02	9.68295678e-01	non-covid
7.22487367e+01	4.44732860e+00	3.24614371e-01	2.21625697e-03	4.70771385e-02	9.92045251e-01	non-covid
6.79034282e+01	4.44415421e+00	3.08181590e-01	2.06790533e-03	4.54742271e-02	9.92480866e-01	non-covid
7.33433169e+01	4.66971872e+00	2.96607655e-01	2.05933507e-03	4.53798972e-02	9.92045135e-01	non-covid
6.97341105e+01	4.44989094e+00	3.05568316e-01	2.37070968e-03	4.86899340e-02	9.92498254e-01	non-covid
6.76589749e+01	4.49278946e+00	2.97777021e-01	2.19176770e-03	4.68163187e-02	9.92568035e-01	non-covid
7.02724126e+01	4.58505896e+00	2.92358788e-01	2.25394699e-03	4.74757516e-02	9.92520169e-01	non-covid
7.61839021e+01	4.55289428e+00	3.10179697e-01	2.92805111e-03	5.41114693e-02	9.92027818e-01	non-covid
3.34449835e+02	8.66813104e+00	3.95538153e-01	6.69936834e-02	2.58831380e-01	9.74981501e-01	non-covid
3.73448657e+02	9.16799585e+00	3.66585196e-01	5.39670581e-02	2.32308110e-01	9.72415301e-01	non-covid
4.58867451e+02	1.12123323e+01	2.79466441e-01	2.39330857e-02	1.54703218e-01	9.64177700e-01	non-covid
5.36551648e+02	1.18486787e+01	2.75467019e-01	2.39553152e-02	1.54775047e-01	9.57827393e-01	non-covid
4.74128338e+02	1.05723956e+01	3.09212334e-01	2.83589788e-02	1.68401243e-01	9.64917538e-01	non-covid
5.09185248e+02	1.12140905e+01	2.95217691e-01	2.79592767e-02	1.67210277e-01	9.61278278e-01	non-covid
4.74851930e+02	1.08009374e+01	2.96461942e-01	3.01765605e-02	1.73714019e-01	9.63833929e-01	non-covid
4.60053616e+02	1.06519573e+01	3.14895420e-01	3.60268883e-02	1.89807503e-01	9.65308464e-01	non-covid
4.37422368e+02	9.64542402e+00	3.62046215e-01	5.34011895e-02	2.31086974e-01	9.68295248e-01	non-covid
1.22606574e+02	5.85322371e+00	2.69371259e-01	2.13969759e-03	4.62568654e-02	9.87361421e-01	non-covid
1.20305197e+02	5.79051508e+00	2.73561905e-01	2.39364033e-03	4.89248437e-02	9.88130779e-01	non-covid
1.22561803e+02	5.78012048e+00	2.72370416e-01	1.98526315e-03	4.45562919e-02	9.87749635e-01	non-covid
1.34326765e+02	5.97598187e+00	2.75337557e-01	1.64357787e-03	4.05410640e-02	9.85881215e-01	non-covid
1.20361246e+02	5.60837277e+00	2.89744154e-01	1.78568143e-03	4.22573240e-02	9.87380218e-01	non-covid
1.31648948e+02	5.88304291e+00	2.91397351e-01	1.96427767e-03	4.43201723e-02	9.86575857e-01	non-covid
1.24613843e+02	5.64725065e+00	2.98056432e-01	1.92744219e-03	4.39026444e-02	9.87213289e-01	non-covid
1.17588800e+02	5.34249161e+00	3.05174140e-01	1.58704526e-03	3.98377367e-02	9.87503916e-01	non-covid
1.33543491e+02	5.66590426e+00	3.02834754e-01	1.75719505e-03	4.19189104e-02	9.85901532e-01	non-covid

1.30548525e+02	5.61093412e+00	3.10703159e-01	1.47395489e-03	3.83921201e-02	9.86137046e-01	non-covid
1.46675346e+02	6.04679789e+00	2.94710585e-01	1.96233018e-03	4.42981962e-02	9.84395449e-01	non-covid
1.29694279e+02	5.72352941e+00	3.01383620e-01	1.50816268e-03	3.88350703e-02	9.85314614e-01	non-covid
1.36770694e+02	5.72050725e+00	3.15592833e-01	1.70060161e-03	4.12383513e-02	9.84159016e-01	non-covid
1.22662250e+02	5.48219144e+00	3.10970441e-01	1.68311585e-03	4.10257950e-02	9.86165008e-01	non-covid
1.26469830e+02	5.76826893e+00	2.93304264e-01	1.67219109e-03	4.08924332e-02	9.85634332e-01	non-covid
1.21863610e+02	5.43437594e+00	3.08441739e-01	1.75244268e-03	4.18621868e-02	9.86141715e-01	non-covid
1.16661317e+02	5.37895089e+00	3.09066114e-01	1.77635641e-03	4.21468435e-02	9.86768058e-01	non-covid
1.08980610e+02	5.21352587e+00	3.11196782e-01	1.64485098e-03	4.05567624e-02	9.87548985e-01	non-covid
1.07665200e+02	5.18359096e+00	3.03573994e-01	1.74268548e-03	4.17454845e-02	9.88220144e-01	non-covid
9.46745868e+01	5.85851599e+00	2.38156855e-01	9.77183483e-04	3.12599342e-02	9.87935396e-01	non-covid
9.52739604e+01	5.72384665e+00	2.53246174e-01	1.03424205e-03	3.21596339e-02	9.88015142e-01	non-covid
9.93790659e+01	5.90166667e+00	2.39334088e-01	9.11070187e-04	3.01839392e-02	9.87682807e-01	non-covid
1.14396949e+02	6.26882671e+00	2.32173734e-01	8.60233256e-04	2.93297333e-02	9.85756988e-01	non-covid
1.13618230e+02	5.90020979e+00	2.63299907e-01	1.22312088e-03	3.49731451e-02	9.85899439e-01	non-covid
1.09893166e+02	5.44963636e+00	3.03543955e-01	1.93726421e-03	4.40143636e-02	9.86218952e-01	non-covid
1.27141132e+02	5.96849662e+00	2.75702600e-01	1.33885640e-03	3.65903867e-02	9.84456560e-01	non-covid
1.25309856e+02	5.95911712e+00	2.83137798e-01	1.43263437e-03	3.78501568e-02	9.84279771e-01	non-covid
1.41231112e+02	6.42748246e+00	2.59394545e-01	1.17951341e-03	3.43440447e-02	9.82273093e-01	non-covid
9.63998143e+01	5.77932955e+00	2.48415645e-01	9.97798081e-04	3.15879420e-02	9.87915073e-01	non-covid
8.90568277e+01	5.51991468e+00	2.56812299e-01	1.10365481e-03	3.32213006e-02	9.88439079e-01	non-covid
1.03824854e+02	5.69369149e+00	2.65820213e-01	1.26416566e-03	3.55551074e-02	9.86793566e-01	non-covid
1.23399376e+02	5.95899382e+00	2.73489886e-01	1.37166244e-03	3.70359615e-02	9.85029754e-01	non-covid
1.23531276e+02	5.98707520e+00	2.72093757e-01	1.39058981e-03	3.72906129e-02	9.84683139e-01	non-covid
1.30089635e+02	6.12054767e+00	2.67203593e-01	1.23254051e-03	3.51075563e-02	9.83682592e-01	non-covid
1.27988287e+02	5.89914582e+00	2.87313396e-01	1.47615382e-03	3.84207473e-02	9.84117554e-01	non-covid
1.29736497e+02	5.73414027e+00	3.06262370e-01	1.70545941e-03	4.12972083e-02	9.83603769e-01	non-covid
1.25352415e+02	5.77148281e+00	2.93781498e-01	1.54487403e-03	3.93048855e-02	9.84608803e-01	non-covid
1.35298734e+02	6.03240630e+00	2.84111071e-01	1.35811968e-03	3.68526753e-02	9.83577761e-01	non-covid
1.18840858e+02	5.59868235e+00	2.97879710e-01	1.60040941e-03	4.00051172e-02	9.84935455e-01	non-covid
1.17206295e+02	5.55627510e+00	3.03268774e-01	1.60589019e-03	4.00735598e-02	9.85316765e-01	non-covid
1.17800371e+02	5.45487510e+00	3.10773658e-01	1.79978949e-03	4.24239259e-02	9.84717076e-01	non-covid
1.19736997e+02	5.55612619e+00	3.11396418e-01	1.81787861e-03	4.26365877e-02	9.84172531e-01	non-covid
1.39320182e+02	5.88039764e+00	2.84101873e-01	1.31466223e-03	3.62582712e-02	9.83796078e-01	non-covid
1.41569203e+02	6.02296094e+00	2.84394737e-01	1.31894601e-03	3.63172964e-02	9.83820802e-01	non-covid
1.25963190e+02	5.49563979e+00	3.18883717e-01	1.80352181e-03	4.24678916e-02	9.85107932e-01	non-covid
1.23815058e+02	5.41300607e+00	3.14113174e-01	1.71061790e-03	4.13596167e-02	9.84817760e-01	non-covid
1.14070367e+02	5.34413343e+00	3.10834121e-01	1.56468467e-03	3.95560953e-02	9.85548353e-01	non-covid
1.67722310e+02	6.23151088e+00	2.93134576e-01	1.93378733e-03	4.39748488e-02	9.81094084e-01	non-covid

1.75083993e+02	6.35671782e+00	2.95754156e-01	2.04180638e-03	4.51863517e-02	9.80393957e-01	non-covid
1.60775813e+02	5.91432885e+00	3.02891396e-01	1.63618551e-03	4.04497900e-02	9.81868604e-01	non-covid
1.75472988e+02	6.26802116e+00	3.02867992e-01	2.04367383e-03	4.52070109e-02	9.80718657e-01	non-covid
1.71089432e+02	6.09964283e+00	3.19024354e-01	2.00453791e-03	4.47720662e-02	9.80642790e-01	non-covid
1.71367656e+02	6.24495968e+00	3.12864156e-01	2.33967651e-03	4.83702027e-02	9.80846981e-01	non-covid
1.62758336e+02	5.99913623e+00	3.23916622e-01	2.39312713e-03	4.89195986e-02	9.81721928e-01	non-covid
1.58899455e+02	5.89245763e+00	3.34284282e-01	2.77806657e-03	5.27073674e-02	9.81680109e-01	non-covid
1.65830120e+02	6.01874382e+00	3.34379439e-01	2.47175695e-03	4.97167673e-02	9.81205020e-01	non-covid
1.58353105e+02	5.93615489e+00	3.29337764e-01	2.54547753e-03	5.04527257e-02	9.82373035e-01	non-covid
1.66519481e+02	6.00525851e+00	3.34388170e-01	2.74909580e-03	5.24318205e-02	9.80975400e-01	non-covid
1.43679536e+02	5.72482765e+00	3.12129151e-01	2.32832672e-03	4.82527380e-02	9.84120751e-01	non-covid
1.31836778e+02	5.52653717e+00	3.14326010e-01	2.51067539e-03	5.01066402e-02	9.85226136e-01	non-covid
1.50779692e+02	5.84515224e+00	3.17619950e-01	2.37516562e-03	4.87356709e-02	9.83395798e-01	non-covid
1.52852895e+02	5.90898140e+00	3.21279650e-01	2.75474873e-03	5.24857003e-02	9.83052098e-01	non-covid
1.47123845e+02	5.91090609e+00	3.12755015e-01	2.23375398e-03	4.72626066e-02	9.83538666e-01	non-covid
1.45620511e+02	5.78149866e+00	3.22710253e-01	2.41843616e-03	4.91775982e-02	9.83657121e-01	non-covid
1.44417196e+02	5.74279319e+00	3.28610162e-01	1.86712442e-03	4.32102351e-02	9.84064804e-01	non-covid
1.38141299e+02	5.64532520e+00	3.22584246e-01	1.90731483e-03	4.36728157e-02	9.84421775e-01	non-covid
1.38470823e+02	5.64366336e+00	3.32083352e-01	1.86876992e-03	4.32292716e-02	9.85032025e-01	non-covid
3.40529840e+02	7.72649967e+00	5.08034680e-01	1.53644371e-01	3.91974962e-01	9.72232256e-01	non-covid
4.41389151e+02	9.72828341e+00	3.71510387e-01	6.49220610e-02	2.54798079e-01	9.63979615e-01	non-covid
3.83791812e+02	8.50116016e+00	4.50156498e-01	1.05189573e-01	3.24329420e-01	9.69132050e-01	non-covid
4.39375927e+02	9.57011381e+00	3.91735851e-01	7.02678055e-02	2.65080753e-01	9.64533990e-01	non-covid
5.12287755e+02	1.04231654e+01	3.54777716e-01	5.53754046e-02	2.35319792e-01	9.57917695e-01	non-covid
5.63547461e+02	1.66190394e+01	7.57050951e-02	2.23756766e-04	1.49585015e-02	9.09802545e-01	covid
5.72566754e+02	1.41706955e+01	1.29702718e-01	1.76282137e-03	4.19859664e-02	9.51456348e-01	covid
4.44249535e+02	1.38423579e+01	1.10306139e-01	8.35005560e-04	2.88964628e-02	9.42411197e-01	covid
3.14796372e+02	8.74366277e+00	3.59084362e-01	3.43259859e-02	1.85272734e-01	9.70332784e-01	covid
5.05689606e+02	1.58667342e+01	7.91935465e-02	2.43884562e-04	1.56168038e-02	9.15036530e-01	covid
5.21123582e+02	1.56713826e+01	8.34832323e-02	2.75918228e-04	1.66107865e-02	9.11441203e-01	covid
5.98715174e+02	1.71744965e+01	7.49329184e-02	2.46286017e-04	1.56935024e-02	8.98211667e-01	covid
5.90777357e+02	1.73454629e+01	7.16421933e-02	2.26170214e-04	1.50389566e-02	8.96167026e-01	covid
5.12834843e+02	1.62935611e+01	7.53076186e-02	2.40091570e-04	1.54948885e-02	9.00318450e-01	covid
4.81303189e+02	1.57498096e+01	7.90202731e-02	2.26833317e-04	1.50609866e-02	9.09032728e-01	covid
5.75956935e+02	1.69943870e+01	7.59460037e-02	2.53023970e-04	1.59067272e-02	8.98154669e-01	covid
4.43709515e+02	1.48102970e+01	8.41403820e-02	2.56367400e-04	1.60114771e-02	9.10794669e-01	covid
4.62704759e+02	1.54253555e+01	8.05500305e-02	2.34974896e-04	1.53288909e-02	9.07511762e-01	covid
5.73552900e+02	1.67098054e+01	7.72661609e-02	2.49541429e-04	1.57968804e-02	8.98439050e-01	covid
5.11753183e+02	1.55180201e+01	8.42524842e-02	2.82109142e-04	1.67961050e-02	9.11604427e-01	covid

4.83373510e+02	1.54185457e+01	8.12721576e-02	2.53346236e-04	1.59168538e-02	9.18576944e-01	covid
5.30303621e+02	1.60955200e+01	7.76607117e-02	2.35888260e-04	1.53586542e-02	9.08643766e-01	covid
5.65465311e+02	1.69122726e+01	7.33037435e-02	2.31203789e-04	1.52053868e-02	8.95721580e-01	covid
5.13350602e+02	1.62859072e+01	7.55633732e-02	2.41831702e-04	1.55509390e-02	9.01481290e-01	covid
4.65538588e+02	1.54590996e+01	8.04362147e-02	2.32020579e-04	1.52322217e-02	9.08116326e-01	covid
4.26611719e+02	1.45005565e+01	8.55017851e-02	2.61531157e-04	1.61719250e-02	9.09351140e-01	covid
5.13012345e+02	1.58885994e+01	7.97383458e-02	2.66992949e-04	1.63399189e-02	9.06213121e-01	covid
5.80437244e+02	1.70848052e+01	7.55068125e-02	2.53621293e-04	1.59254919e-02	8.97596397e-01	covid
5.07625186e+02	1.59920964e+01	7.90860659e-02	2.66233419e-04	1.63166608e-02	9.03968659e-01	covid
4.60858134e+02	1.53968834e+01	7.88349840e-02	2.55645673e-04	1.59889234e-02	9.13863997e-01	covid
4.95094837e+02	1.54444159e+01	8.28448585e-02	2.83641557e-04	1.68416613e-02	9.11962910e-01	covid
5.20719782e+02	1.62003143e+01	7.82940609e-02	2.69686766e-04	1.64221425e-02	9.04987782e-01	covid
4.87970067e+02	1.54342476e+01	8.18236740e-02	2.40332130e-04	1.55026491e-02	9.19633895e-01	covid
4.47847679e+02	1.45765563e+01	8.89075889e-02	2.72712359e-04	1.65140049e-02	9.27870293e-01	covid
4.55259105e+02	1.43632208e+01	9.32208056e-02	2.78348673e-04	1.66837847e-02	9.33780136e-01	covid
4.71471299e+02	1.45348183e+01	9.11757740e-02	2.66648141e-04	1.63293644e-02	9.31316318e-01	covid
4.98142633e+02	1.49244851e+01	9.02297844e-02	2.79167853e-04	1.67083169e-02	9.26999706e-01	covid
5.00827694e+02	1.50610818e+01	8.87853220e-02	2.67043878e-04	1.63414772e-02	9.30675663e-01	covid
4.76136208e+02	1.47586760e+01	9.21040669e-02	2.53798492e-04	1.59310543e-02	9.35063794e-01	covid
4.42458939e+02	1.41369738e+01	9.45689909e-02	2.45755634e-04	1.56765951e-02	9.36543922e-01	covid
4.44305720e+02	1.37638211e+01	1.00624884e-01	2.76213714e-04	1.66196785e-02	9.34052105e-01	covid
4.93855566e+02	1.45611153e+01	9.29128856e-02	2.67717932e-04	1.63620883e-02	9.27893957e-01	covid
5.11292497e+02	1.49824404e+01	9.20033043e-02	2.84294311e-04	1.68610293e-02	9.25960418e-01	covid
4.82365481e+02	1.45676538e+01	9.71270912e-02	2.95684034e-04	1.71954655e-02	9.31433934e-01	covid
4.75390054e+02	1.43033405e+01	1.01433908e-01	3.57622894e-04	1.89109200e-02	9.35559361e-01	covid
4.50591152e+02	1.34798001e+01	1.11007334e-01	3.89600896e-04	1.97383104e-02	9.39152893e-01	covid
4.76932851e+02	1.39679515e+01	1.06606420e-01	3.55674027e-04	1.88593220e-02	9.37597670e-01	covid
4.50351720e+02	1.39388206e+01	1.00027926e-01	3.31260980e-04	1.82005764e-02	9.39691332e-01	covid
4.36990902e+02	1.36848023e+01	1.01359557e-01	2.98842734e-04	1.72870684e-02	9.41746384e-01	covid
4.31362040e+02	1.36030831e+01	1.01898512e-01	2.91206593e-04	1.70647764e-02	9.43439403e-01	covid
4.43308934e+02	1.35366839e+01	1.05581836e-01	3.22878635e-04	1.79688240e-02	9.44322260e-01	covid
4.78745769e+02	1.38282946e+01	1.09636355e-01	3.74354631e-04	1.93482462e-02	9.41143987e-01	covid
4.72731757e+02	1.36894562e+01	1.07214273e-01	3.55667053e-04	1.88591371e-02	9.40080669e-01	covid
4.64357624e+02	1.38445051e+01	1.04728437e-01	4.55191191e-04	2.13352101e-02	9.42023973e-01	covid
4.25342094e+02	1.34692739e+01	1.07994802e-01	4.46945298e-04	2.11410808e-02	9.46458000e-01	covid
3.60216466e+02	1.25899744e+01	1.11999158e-01	4.46601127e-04	2.11329394e-02	9.53404945e-01	covid
3.60929207e+02	1.25262772e+01	1.15052202e-01	5.34175086e-04	2.31122281e-02	9.54850966e-01	covid
3.81477862e+02	1.28746509e+01	1.10326175e-01	5.16427024e-04	2.27250308e-02	9.50543772e-01	covid
3.98532424e+02	1.32624596e+01	1.07500243e-01	5.50370323e-04	2.34599728e-02	9.46773594e-01	covid

4.26073150e+02	1.39767707e+01	1.03639904e-01	6.00044829e-04	2.44958125e-02	9.45555414e-01	covid
3.55869802e+02	1.31640711e+01	1.06449706e-01	6.83471270e-04	2.61432835e-02	9.49493555e-01	covid
3.73340700e+02	1.34191694e+01	1.07414263e-01	7.38315843e-04	2.71719680e-02	9.50360837e-01	covid
3.71225579e+02	1.30085417e+01	1.20100453e-01	9.57152885e-04	3.09378875e-02	9.48721274e-01	covid
4.49416389e+02	1.45497317e+01	1.05326871e-01	1.01773910e-03	3.19020234e-02	9.38252273e-01	covid
4.61571115e+02	1.50971280e+01	1.00309596e-01	8.37700676e-04	2.89430592e-02	9.31032470e-01	covid
4.66743346e+02	1.55226027e+01	9.36324493e-02	7.01542580e-04	2.64866491e-02	9.26566870e-01	covid
4.59551939e+02	1.53577004e+01	9.66373963e-02	8.17201843e-04	2.85867424e-02	9.27038335e-01	covid
1.17803916e+02	5.07750585e+00	2.93963285e-01	2.26321798e-03	4.75732906e-02	9.80647670e-01	covid
1.22312094e+02	5.34756263e+00	2.89521977e-01	1.61156128e-03	4.01442558e-02	9.82650328e-01	covid
1.22532956e+02	5.35983720e+00	2.87841387e-01	1.60944758e-03	4.01179209e-02	9.82408978e-01	covid
1.36097620e+02	5.67992277e+00	2.81999517e-01	1.57367388e-03	3.96695586e-02	9.82444240e-01	covid
1.37203620e+02	5.76741983e+00	2.78487590e-01	1.36677250e-03	3.69698864e-02	9.83526474e-01	covid
1.35096537e+02	5.84410810e+00	2.70109962e-01	1.45786225e-03	3.81819623e-02	9.84230306e-01	covid
1.42308923e+02	6.22296446e+00	2.51354987e-01	1.04632150e-03	3.23468932e-02	9.85198396e-01	covid
1.46873727e+02	6.31310680e+00	2.50501790e-01	1.10407825e-03	3.32276729e-02	9.84586096e-01	covid
1.42904482e+02	6.14188665e+00	2.58614711e-01	1.24404848e-03	3.52710714e-02	9.84431485e-01	covid
1.54060870e+02	6.42664492e+00	2.48744372e-01	1.16158905e-03	3.40820928e-02	9.83630711e-01	covid
1.52894411e+02	6.38139303e+00	2.54834976e-01	1.42419869e-03	3.77385570e-02	9.83590267e-01	covid
2.28166306e+02	7.68943636e+00	2.27208941e-01	9.75464989e-04	3.12324349e-02	9.75663125e-01	covid
1.92183196e+02	7.22071243e+00	2.35873909e-01	9.18019401e-04	3.02988350e-02	9.78129043e-01	covid
1.86168482e+02	7.11378016e+00	2.34523861e-01	1.02686469e-03	3.20447296e-02	9.78971102e-01	covid
1.73249159e+02	6.82048472e+00	2.41954724e-01	1.14647854e-03	3.38596890e-02	9.80852012e-01	covid
1.76446281e+02	6.90827104e+00	2.44924344e-01	1.25283273e-03	3.53953773e-02	9.80733939e-01	covid
1.82776612e+02	6.94573727e+00	2.49936739e-01	1.56558494e-03	3.95674733e-02	9.79938925e-01	covid
1.76806399e+02	6.86450196e+00	2.45364219e-01	1.14331877e-03	3.38129971e-02	9.80371628e-01	covid
1.69970329e+02	6.73639802e+00	2.55061366e-01	1.47412169e-03	3.83942924e-02	9.81072704e-01	covid
1.61946924e+02	6.64628620e+00	2.55038733e-01	1.29930032e-03	3.60458087e-02	9.81784727e-01	covid
1.62595605e+02	6.69395682e+00	2.52826445e-01	1.14714866e-03	3.38695831e-02	9.81618105e-01	covid
1.86489243e+02	7.18821401e+00	2.41091019e-01	1.23557407e-03	3.51507336e-02	9.79044668e-01	covid
1.71697822e+02	6.88262195e+00	2.48291346e-01	1.30142201e-03	3.60752271e-02	9.80564677e-01	covid
1.83842794e+02	7.10061582e+00	2.51326281e-01	1.53729525e-03	3.92083569e-02	9.79265901e-01	covid
1.67943666e+02	6.75986274e+00	2.52051351e-01	1.17407587e-03	3.42647905e-02	9.80985588e-01	covid
1.83926008e+02	7.13084237e+00	2.46937154e-01	1.08108646e-03	3.28798792e-02	9.79032342e-01	covid
1.61114997e+02	6.84085983e+00	2.54275995e-01	1.38297376e-03	3.71883552e-02	9.81561044e-01	covid
1.62255791e+02	6.82526344e+00	2.56532636e-01	1.35152940e-03	3.67631528e-02	9.81350632e-01	covid
1.67027020e+02	7.10135925e+00	2.46720850e-01	1.26545611e-03	3.55732499e-02	9.80545871e-01	covid
1.72951220e+02	7.20527697e+00	2.34768062e-01	1.10147225e-03	3.31884355e-02	9.79784740e-01	covid
1.88082828e+02	7.16125019e+00	2.41202914e-01	1.01778677e-03	3.19027706e-02	9.78571247e-01	covid

1.92765377e+02	7.25873332e+00	2.36851615e-01	1.01479239e-03	3.18558063e-02	9.78092591e-01	covid
1.91176533e+02	7.32394091e+00	2.35307025e-01	1.11553873e-03	3.33996815e-02	9.78705633e-01	covid
2.02925765e+02	7.64844120e+00	2.29232624e-01	1.03811141e-03	3.22197363e-02	9.77005214e-01	covid
1.96121423e+02	7.49305448e+00	2.33311125e-01	1.14527372e-03	3.38418930e-02	9.77514769e-01	covid
1.79265652e+02	7.11821336e+00	2.42611011e-01	1.10636777e-03	3.32621071e-02	9.79492495e-01	covid
1.70413731e+02	7.07067814e+00	2.38060769e-01	1.23363647e-03	3.51231614e-02	9.80652013e-01	covid
1.73954695e+02	7.15628831e+00	2.36402325e-01	1.21171440e-03	3.48096883e-02	9.80765802e-01	covid

c. Arah 90º

contrast	dissimilarity	homogeneity	ASM	energy	correlation	result
5.17908023e+01	3.57332477e+00	4.03315894e-01	2.95977735e-03	5.44038358e-02	9.95138347e-01	non-covid
4.04769634e+01	3.34661420e+00	3.97607654e-01	4.05621956e-03	6.36884570e-02	9.96423706e-01	non-covid
6.40501627e+01	3.85188924e+00	3.90296223e-01	2.61980066e-03	5.11839883e-02	9.93617061e-01	non-covid
4.07573329e+01	3.36284596e+00	4.01606420e-01	2.12624237e-03	4.61111957e-02	9.95025959e-01	non-covid
6.25893860e+01	3.82664057e+00	3.93377147e-01	3.20000562e-03	5.65685921e-02	9.94407580e-01	non-covid
6.38255852e+01	3.80608359e+00	4.05508055e-01	3.51586386e-03	5.92947204e-02	9.94229520e-01	non-covid
6.03146802e+01	3.74893399e+00	4.04828381e-01	3.40535119e-03	5.83553870e-02	9.94373800e-01	non-covid
6.42334956e+01	3.80339518e+00	4.00415108e-01	3.27578168e-03	5.72344449e-02	9.93971742e-01	non-covid
6.81142892e+01	3.85198792e+00	4.07466012e-01	3.15729597e-03	5.61898209e-02	9.93692956e-01	non-covid
7.17188202e+01	3.93801966e+00	4.15880856e-01	3.94691046e-03	6.28244416e-02	9.93214711e-01	non-covid
6.92192902e+01	3.93429437e+00	3.98808586e-01	3.18702359e-03	5.64537297e-02	9.93360123e-01	non-covid
6.46592120e+01	3.77158967e+00	4.02755377e-01	3.26719853e-03	5.71594133e-02	9.93884920e-01	non-covid
6.39151923e+01	3.78850820e+00	4.03946623e-01	2.77435072e-03	5.26721057e-02	9.94032093e-01	non-covid
6.37169808e+01	3.79741672e+00	4.00528788e-01	2.78487026e-03	5.27718700e-02	9.94054868e-01	non-covid
6.38185231e+01	3.83808999e+00	4.04799790e-01	3.17011684e-03	5.63037906e-02	9.93928836e-01	non-covid
6.05522364e+01	3.79864519e+00	4.00994999e-01	3.18404337e-03	5.64273282e-02	9.94185943e-01	non-covid
5.60688368e+01	3.63027658e+00	4.10921007e-01	2.96528087e-03	5.44543926e-02	9.94466815e-01	non-covid
5.31887846e+01	3.53536666e+00	4.08452702e-01	2.92121571e-03	5.40482720e-02	9.94668392e-01	non-covid
4.69584184e+01	3.36045792e+00	4.00664318e-01	2.21874158e-03	4.71035198e-02	9.95401963e-01	non-covid
4.89056669e+01	4.00549986e+00	3.25548482e-01	3.63411345e-03	6.02836084e-02	9.94014666e-01	non-covid
5.08723651e+01	4.00863404e+00	3.26912074e-01	2.63498073e-03	5.13320634e-02	9.93790932e-01	non-covid
5.31850656e+01	4.16636825e+00	3.17161348e-01	3.03574725e-03	5.50976156e-02	9.93586479e-01	non-covid
4.57908476e+01	3.88247728e+00	3.37759539e-01	3.07144826e-03	5.54206483e-02	9.94436811e-01	non-covid
5.08657279e+01	4.02771348e+00	3.39878923e-01	2.75518184e-03	5.24898261e-02	9.93613933e-01	non-covid
5.50042475e+01	4.15397614e+00	3.29543564e-01	2.26745160e-03	4.76177656e-02	9.93119655e-01	non-covid
6.05328045e+01	4.29484715e+00	3.25184265e-01	2.08168339e-03	4.56254687e-02	9.92295800e-01	non-covid
5.06195816e+01	3.88979733e+00	3.47636483e-01	2.27987755e-03	4.77480633e-02	9.93635541e-01	non-covid
4.80902718e+01	3.84434059e+00	3.51101236e-01	2.12197774e-03	4.60649297e-02	9.93903450e-01	non-covid
5.34029879e+01	3.98100152e+00	3.51031031e-01	2.12363977e-03	4.60829661e-02	9.93049116e-01	non-covid

4.75769176e+01	3.69890304e+00	3.69524208e-01	2.21134905e-03	4.70249832e-02	9.93597982e-01	non-covid
4.97514254e+01	3.69805162e+00	3.68546975e-01	2.28008979e-03	4.77502858e-02	9.93380246e-01	non-covid
5.72231425e+01	4.05447830e+00	3.42225961e-01	1.70015243e-03	4.12329048e-02	9.92287430e-01	non-covid
4.31299964e+01	3.66957202e+00	3.38531526e-01	1.74948095e-03	4.18267970e-02	9.93841845e-01	non-covid
3.96270014e+01	3.59811254e+00	3.37124427e-01	1.64816568e-03	4.05976068e-02	9.93763557e-01	non-covid
3.30023496e+01	3.14699248e+00	3.89563241e-01	4.43664316e-03	6.66081313e-02	9.96715859e-01	non-covid
4.22479466e+01	3.36474594e+00	4.05168134e-01	3.89431206e-03	6.24044234e-02	9.95958308e-01	non-covid
4.68578891e+01	3.57586166e+00	3.87289794e-01	3.28233354e-03	5.72916533e-02	9.95367397e-01	non-covid
5.07852428e+01	3.66666332e+00	3.93921774e-01	3.49366342e-03	5.91072197e-02	9.95251870e-01	non-covid
6.54384293e+01	3.92645516e+00	3.92504009e-01	3.19613976e-03	5.65344121e-02	9.93433272e-01	non-covid
6.30321831e+01	3.87639246e+00	3.86761851e-01	2.80804355e-03	5.29909761e-02	9.93702817e-01	non-covid
6.42364892e+01	3.94689842e+00	3.84988800e-01	2.67678486e-03	5.17376542e-02	9.93702413e-01	non-covid
6.94809263e+01	3.96061954e+00	3.94429895e-01	2.83589539e-03	5.32531256e-02	9.93205845e-01	non-covid
6.22827612e+01	3.85969514e+00	3.79514760e-01	2.56948600e-03	5.06900976e-02	9.93615451e-01	non-covid
6.74683999e+01	3.96074610e+00	3.83897921e-01	2.54480681e-03	5.04460782e-02	9.93400374e-01	non-covid
6.73198534e+01	4.09523913e+00	3.60689408e-01	2.16216395e-03	4.64990747e-02	9.93171675e-01	non-covid
5.82188525e+01	3.67384304e+00	3.94378597e-01	2.30256439e-03	4.79850434e-02	9.94369508e-01	non-covid
4.82374602e+01	3.37171890e+00	4.11517459e-01	2.70048666e-03	5.19662069e-02	9.95335006e-01	non-covid
5.03079243e+01	3.47674411e+00	4.04310719e-01	2.78721891e-03	5.27941182e-02	9.95062838e-01	non-covid
4.54837161e+01	3.33752928e+00	4.04073088e-01	2.60775551e-03	5.10661875e-02	9.95629147e-01	non-covid
3.21054945e+01	3.13846154e+00	3.85628254e-01	4.23285164e-03	6.50603692e-02	9.96772733e-01	non-covid
3.20984513e+01	3.09825489e+00	3.92820810e-01	4.61994566e-03	6.79701822e-02	9.96766656e-01	non-covid
4.07090208e+01	3.30730572e+00	3.85992924e-01	3.29820019e-03	5.74299590e-02	9.96117619e-01	non-covid
5.83617833e+01	3.73566627e+00	3.92859517e-01	3.34353650e-03	5.78233214e-02	9.94551519e-01	non-covid
6.25307623e+01	3.86897437e+00	3.86078709e-01	2.92366721e-03	5.40709461e-02	9.93760074e-01	non-covid
6.22455322e+01	3.96621349e+00	3.74519010e-01	2.32725005e-03	4.82415801e-02	9.93791003e-01	non-covid
6.12023422e+01	3.80611334e+00	3.96943136e-01	2.68822885e-03	5.18481326e-02	9.94148290e-01	non-covid
6.43055944e+01	3.84836165e+00	3.88409094e-01	2.71569692e-03	5.21123490e-02	9.93548533e-01	non-covid
6.06244247e+01	3.74297337e+00	3.94081678e-01	2.49807625e-03	4.99807588e-02	9.93971900e-01	non-covid
6.53336348e+01	3.84976041e+00	4.04086413e-01	2.45499328e-03	4.95478888e-02	9.93473159e-01	non-covid
6.04359231e+01	3.74387526e+00	3.93365503e-01	2.82427286e-03	5.31438882e-02	9.94101123e-01	non-covid
5.36860819e+01	3.55442995e+00	4.00895954e-01	2.72037580e-03	5.21572219e-02	9.94798758e-01	non-covid
5.16076695e+01	3.48268823e+00	4.07108350e-01	2.80454117e-03	5.29579189e-02	9.94956223e-01	non-covid
4.67091720e+01	3.32020620e+00	4.15895460e-01	2.90211663e-03	5.38712969e-02	9.95527431e-01	non-covid
4.42187392e+01	3.20397215e+00	4.22608364e-01	2.49199759e-03	4.99199118e-02	9.95898713e-01	non-covid
4.84538300e+01	3.84906442e+00	3.48922109e-01	2.91778858e-03	5.40165583e-02	9.95316262e-01	non-covid
5.07145617e+01	3.81329444e+00	3.57974160e-01	2.89557318e-03	5.38105303e-02	9.95195941e-01	non-covid
5.33309229e+01	3.81079749e+00	3.71463255e-01	2.80806965e-03	5.29912224e-02	9.94945933e-01	non-covid
5.74509676e+01	3.99713571e+00	3.59331814e-01	2.40625229e-03	4.90535655e-02	9.94311466e-01	non-covid

5.72340378e+01	3.91284553e+00	3.73094566e-01	2.86157987e-03	5.34937367e-02	9.94580820e-01	non-covid
5.97987652e+01	3.98116720e+00	3.75178843e-01	2.59677550e-03	5.09585665e-02	9.94176027e-01	non-covid
6.78464860e+01	4.04884537e+00	3.81358864e-01	2.54278830e-03	5.04260677e-02	9.93352971e-01	non-covid
6.04772318e+01	3.70082206e+00	3.97531366e-01	2.59684580e-03	5.09592563e-02	9.94314786e-01	non-covid
6.01912145e+01	3.72493415e+00	3.97504225e-01	2.42426609e-03	4.92368367e-02	9.94250045e-01	non-covid
6.21231461e+01	4.27876404e+00	3.22086088e-01	4.94901685e-03	7.03492491e-02	9.92622191e-01	non-covid
4.91071152e+01	4.05931196e+00	3.17681066e-01	2.87486855e-03	5.36178007e-02	9.94224779e-01	non-covid
6.01017236e+01	4.32503577e+00	3.14929855e-01	3.37406098e-03	5.80866678e-02	9.93126558e-01	non-covid
6.93485913e+01	4.68969927e+00	2.90267929e-01	2.62187851e-03	5.12042821e-02	9.91972506e-01	non-covid
6.63917017e+01	4.56777836e+00	3.12610815e-01	1.95243220e-03	4.41863350e-02	9.92282935e-01	non-covid
6.54479854e+01	4.40425884e+00	3.17278202e-01	2.35927178e-03	4.85723356e-02	9.92298784e-01	non-covid
7.61983917e+01	4.88874189e+00	2.86319015e-01	1.49374277e-03	3.86489686e-02	9.90991745e-01	non-covid
7.23418175e+01	4.78413496e+00	2.89215547e-01	2.69140696e-03	5.18787718e-02	9.91755855e-01	non-covid
6.34403511e+01	4.50222812e+00	3.02314250e-01	1.75297405e-03	4.18685330e-02	9.92520572e-01	non-covid
6.76903434e+01	4.44611659e+00	3.21970660e-01	2.37535027e-03	4.87375653e-02	9.92122552e-01	non-covid
8.15879704e+01	5.11510166e+00	2.75311875e-01	1.38153875e-03	3.71690564e-02	9.90447643e-01	non-covid
6.97679899e+01	4.59489562e+00	3.09834075e-01	1.70943325e-03	4.13452930e-02	9.91726920e-01	non-covid
2.09359504e+02	6.21069199e+00	5.28058172e-01	1.71395698e-01	4.13999636e-01	9.81854196e-01	non-covid
2.54665079e+02	7.68731401e+00	4.16154785e-01	8.77344962e-02	2.96200095e-01	9.77461366e-01	non-covid
2.57888026e+02	7.27120963e+00	4.50751280e-01	1.07354137e-01	3.27649412e-01	9.78423496e-01	non-covid
2.74576412e+02	7.93334984e+00	3.97795205e-01	7.84227785e-02	2.80040673e-01	9.75787310e-01	non-covid
2.48665252e+02	7.20095814e+00	4.32792992e-01	9.61539176e-02	3.10086952e-01	9.78724577e-01	non-covid
2.58097259e+02	7.18130757e+00	4.18464051e-01	8.42055569e-02	2.90181938e-01	9.77662985e-01	non-covid
3.12147433e+02	8.16175539e+00	4.25959778e-01	9.55434616e-02	3.09101054e-01	9.73045372e-01	non-covid
2.80938255e+02	6.94182991e+00	4.97134432e-01	1.41334112e-01	3.75944294e-01	9.77343104e-01	non-covid
3.04507399e+02	7.54301104e+00	4.67568048e-01	1.22617236e-01	3.50167440e-01	9.75285474e-01	non-covid
2.73092919e+02	7.09110063e+00	4.62617231e-01	1.05089647e-01	3.24175333e-01	9.78286109e-01	non-covid
2.14216111e+02	6.32834921e+00	5.27407493e-01	1.78885807e-01	4.22948941e-01	9.80869781e-01	non-covid
1.79924380e+02	7.38493080e+00	2.30432827e-01	1.47141484e-03	3.83590256e-02	9.81436108e-01	non-covid
1.87102774e+02	7.55212687e+00	2.28734679e-01	1.19701763e-03	3.45979426e-02	9.80250623e-01	non-covid
2.09285953e+02	7.81424855e+00	2.18573485e-01	1.37602915e-03	3.70948670e-02	9.78198372e-01	non-covid
2.16274285e+02	7.63987326e+00	2.38649233e-01	1.49096432e-03	3.86130071e-02	9.78559877e-01	non-covid
1.98174479e+02	7.21702860e+00	2.40116489e-01	1.49234813e-03	3.86309220e-02	9.79811714e-01	non-covid
2.07839159e+02	7.42724781e+00	2.32897064e-01	1.18974889e-03	3.44927367e-02	9.78561054e-01	non-covid
2.20688257e+02	7.88591785e+00	2.17412588e-01	1.32099769e-03	3.63455319e-02	9.77679894e-01	non-covid
2.09448674e+02	7.82436119e+00	2.19547339e-01	1.29726334e-03	3.60175422e-02	9.78565661e-01	non-covid
1.95554938e+02	7.13090380e+00	2.46119254e-01	1.51754800e-03	3.89557185e-02	9.80537054e-01	non-covid
1.96186871e+02	7.19246486e+00	2.39979426e-01	1.44642230e-03	3.80318590e-02	9.80672723e-01	non-covid
2.09940173e+02	7.43042727e+00	2.34498739e-01	1.43728033e-03	3.79114802e-02	9.79401269e-01	non-covid

2.13895043e+02	7.28609375e+00	2.51182761e-01	1.19669942e-03	3.45933435e-02	9.79276323e-01	non-covid
2.14475774e+02	7.51408997e+00	2.35706662e-01	1.24147464e-03	3.52345660e-02	9.78316491e-01	non-covid
2.16491993e+02	6.88985218e+00	2.89560161e-01	1.66611231e-03	4.08180390e-02	9.79560783e-01	non-covid
1.96901672e+02	6.85736777e+00	2.72673746e-01	1.53567372e-03	3.91876731e-02	9.81053938e-01	non-covid
1.81991447e+02	6.82166445e+00	2.41694196e-01	1.17999331e-03	3.43510307e-02	9.81965499e-01	non-covid
3.06198529e+01	3.11168592e+00	3.87153814e-01	2.82388971e-03	5.31402833e-02	9.96628567e-01	non-covid
2.96126027e+01	3.16887556e+00	3.64799735e-01	2.59136695e-03	5.09054707e-02	9.96718855e-01	non-covid
3.31951216e+01	3.37875132e+00	3.47753128e-01	2.56145455e-03	5.06108146e-02	9.96398700e-01	non-covid
3.54499122e+01	3.40062360e+00	3.45500216e-01	2.81856236e-03	5.30901343e-02	9.96183931e-01	non-covid
3.25185029e+01	3.35833052e+00	3.43510175e-01	2.73934275e-03	5.23387309e-02	9.96425686e-01	non-covid
3.69327664e+01	3.56856557e+00	3.29570487e-01	2.76303775e-03	5.25646055e-02	9.96067049e-01	non-covid
4.10520620e+01	3.55595808e+00	3.45021484e-01	3.44570155e-03	5.87000984e-02	9.95702081e-01	non-covid
1.85085290e+02	6.75852536e+00	4.23773644e-01	7.49366669e-02	2.73745624e-01	9.86148606e-01	non-covid
1.76251064e+02	6.57118243e+00	4.09192327e-01	6.27993707e-02	2.50598026e-01	9.86980110e-01	non-covid
2.48761088e+02	8.52854165e+00	3.09753317e-01	2.78839080e-02	1.66984754e-01	9.80606636e-01	non-covid
2.61892943e+02	8.43339011e+00	3.12765765e-01	2.84811258e-02	1.68763520e-01	9.79439136e-01	non-covid
2.65432322e+02	8.15915106e+00	3.39571718e-01	3.28129423e-02	1.81143430e-01	9.80372492e-01	non-covid
2.71234028e+02	8.22856188e+00	3.33364545e-01	3.29731088e-02	1.81584991e-01	9.79393166e-01	non-covid
2.55413908e+02	8.20096115e+00	3.27516089e-01	3.44815578e-02	1.85692105e-01	9.80563618e-01	non-covid
2.50505250e+02	8.00820889e+00	3.47762764e-01	4.12353481e-02	2.03064886e-01	9.81122764e-01	non-covid
2.44082395e+02	7.25883141e+00	3.94697095e-01	5.96566882e-02	2.44247187e-01	9.82322991e-01	non-covid
6.03618293e+01	4.33396355e+00	3.17312882e-01	2.68949608e-03	5.18603518e-02	9.93775108e-01	non-covid
6.07767202e+01	4.35822821e+00	3.23138004e-01	2.95470231e-03	5.43571735e-02	9.94003559e-01	non-covid
5.91582555e+01	4.25724335e+00	3.27953911e-01	2.50613525e-03	5.00613149e-02	9.94085253e-01	non-covid
6.31772590e+01	4.32178258e+00	3.32112084e-01	2.13697020e-03	4.62273750e-02	9.93362493e-01	non-covid
6.41394703e+01	4.28167099e+00	3.35403852e-01	2.22347118e-03	4.71536974e-02	9.93273102e-01	non-covid
7.01717798e+01	4.43101820e+00	3.44334919e-01	2.51291738e-03	5.01290074e-02	9.92843470e-01	non-covid
6.50688591e+01	4.25815121e+00	3.50393798e-01	2.42962488e-03	4.92912252e-02	9.93320907e-01	non-covid
5.97553114e+01	4.00233410e+00	3.60734702e-01	2.02356448e-03	4.49840470e-02	9.93650215e-01	non-covid
7.07177973e+01	4.23112611e+00	3.62907609e-01	2.21908305e-03	4.71071443e-02	9.92534882e-01	non-covid
7.00062577e+01	4.15934959e+00	3.78127679e-01	1.97366495e-03	4.44259491e-02	9.92569815e-01	non-covid
7.95506161e+01	4.51719261e+00	3.52335633e-01	2.51525150e-03	5.01522831e-02	9.91538723e-01	non-covid
6.43710310e+01	4.03777816e+00	3.73402417e-01	2.06751162e-03	4.54698979e-02	9.92708127e-01	non-covid
6.22930654e+01	3.94618894e+00	3.87845791e-01	2.32509696e-03	4.82192592e-02	9.92783731e-01	non-covid
5.71978958e+01	3.76334510e+00	3.93184971e-01	2.39590580e-03	4.89479908e-02	9.93546136e-01	non-covid
6.27765153e+01	4.03108877e+00	3.74485389e-01	2.42171048e-03	4.92108777e-02	9.92863207e-01	non-covid
6.06538990e+01	3.84605298e+00	3.84648726e-01	2.37917378e-03	4.87767750e-02	9.93100155e-01	non-covid
5.56762153e+01	3.72936699e+00	3.90236971e-01	2.46328677e-03	4.96315098e-02	9.93682404e-01	non-covid
4.96848386e+01	3.58738262e+00	3.88772176e-01	2.23588609e-03	4.72851572e-02	9.94320853e-01	non-covid

4.49570996e+01	3.43489265e+00	3.83500825e-01	2.33456890e-03	4.83173768e-02	9.95079420e-01	non-covid
4.38203516e+01	4.12976467e+00	2.96920056e-01	1.33589966e-03	3.65499612e-02	9.94407309e-01	non-covid
4.43994010e+01	4.05572755e+00	3.12678988e-01	1.36350126e-03	3.69256180e-02	9.94408905e-01	non-covid
4.88644526e+01	4.31427007e+00	2.88264175e-01	1.16546483e-03	3.41389049e-02	9.93938646e-01	non-covid
5.41191007e+01	4.50251799e+00	2.85232051e-01	1.11620905e-03	3.34097149e-02	9.93259572e-01	non-covid
5.58665117e+01	4.30556626e+00	3.15490281e-01	1.55972296e-03	3.94933281e-02	9.93061847e-01	non-covid
5.29781072e+01	3.89419355e+00	3.69907088e-01	2.56452786e-03	5.06411677e-02	9.93350317e-01	non-covid
5.90119439e+01	4.15039873e+00	3.43241455e-01	1.82760915e-03	4.27505456e-02	9.92788489e-01	non-covid
6.04950919e+01	4.24614516e+00	3.44147564e-01	1.88272585e-03	4.33903889e-02	9.92407347e-01	non-covid
7.02847023e+01	4.58543311e+00	3.19976256e-01	1.54334547e-03	3.92854358e-02	9.91179221e-01	non-covid
4.51870504e+01	4.11412127e+00	3.06136904e-01	1.30733293e-03	3.61570592e-02	9.94328895e-01	non-covid
4.38579328e+01	4.04459942e+00	3.07288883e-01	1.40289316e-03	3.74552153e-02	9.94297915e-01	non-covid
4.94956318e+01	4.07055339e+00	3.30201056e-01	1.69092304e-03	4.11208346e-02	9.93697598e-01	non-covid
5.65890309e+01	4.18316043e+00	3.37329294e-01	1.83555814e-03	4.28434142e-02	9.93131138e-01	non-covid
6.16239340e+01	4.37479702e+00	3.24030568e-01	1.76623639e-03	4.20266152e-02	9.92356726e-01	non-covid
6.75060168e+01	4.46791384e+00	3.24393158e-01	1.60027514e-03	4.00034391e-02	9.91527236e-01	non-covid
6.43685945e+01	4.23897389e+00	3.49944477e-01	1.94019692e-03	4.40476665e-02	9.92011356e-01	non-covid
5.77752470e+01	3.91450823e+00	3.79426402e-01	2.33249325e-03	4.82958927e-02	9.92692035e-01	non-covid
6.09611682e+01	4.06744673e+00	3.57009378e-01	1.99568006e-03	4.46730350e-02	9.92509381e-01	non-covid
5.88014688e+01	4.08915368e+00	3.48335633e-01	1.78347810e-03	4.22312455e-02	9.92861630e-01	non-covid
5.88231016e+01	4.05318400e+00	3.54754118e-01	2.03227494e-03	4.50807603e-02	9.92537185e-01	non-covid
5.59405882e+01	3.89355124e+00	3.73702826e-01	2.18362801e-03	4.67293057e-02	9.92985907e-01	non-covid
5.85574815e+01	3.91778367e+00	3.72261981e-01	2.28639106e-03	4.78162217e-02	9.92394579e-01	non-covid
5.61832875e+01	3.85428025e+00	3.86972223e-01	2.50630935e-03	5.00630538e-02	9.92565785e-01	non-covid
6.05222085e+01	3.89413128e+00	3.66375793e-01	1.87243907e-03	4.32716890e-02	9.92956950e-01	non-covid
6.28955698e+01	4.04230411e+00	3.60598523e-01	1.84130299e-03	4.29104066e-02	9.92809085e-01	non-covid
5.11184032e+01	3.63849934e+00	3.98657129e-01	2.59027602e-03	5.08947544e-02	9.93953633e-01	non-covid
5.09459129e+01	3.57445357e+00	4.02131916e-01	2.54968364e-03	5.04943922e-02	9.93750386e-01	non-covid
5.34485469e+01	3.72127605e+00	3.88885714e-01	2.19186496e-03	4.68173575e-02	9.93225195e-01	non-covid
8.27019017e+01	4.46769515e+00	3.60117071e-01	2.53932117e-03	5.03916776e-02	9.90682943e-01	non-covid
8.92158020e+01	4.66714732e+00	3.57079547e-01	2.65996625e-03	5.15748607e-02	9.90016017e-01	non-covid
8.81948788e+01	4.44826623e+00	3.70812164e-01	2.18574578e-03	4.67519602e-02	9.90047506e-01	non-covid
9.03110549e+01	4.54253165e+00	3.71284257e-01	2.76466813e-03	5.25801116e-02	9.90076325e-01	non-covid
8.42299154e+01	4.42550086e+00	3.86112254e-01	2.69233257e-03	5.18876919e-02	9.90464133e-01	non-covid
8.47992076e+01	4.51248852e+00	3.74175577e-01	3.12624492e-03	5.59128333e-02	9.90519172e-01	non-covid
8.38494681e+01	4.41205674e+00	3.85079792e-01	3.14812925e-03	5.61081923e-02	9.90578656e-01	non-covid
8.34663552e+01	4.38274422e+00	4.02764756e-01	3.72402325e-03	6.10247757e-02	9.90374944e-01	non-covid
8.24771205e+01	4.36933641e+00	3.97250867e-01	3.24532684e-03	5.69677702e-02	9.90651134e-01	non-covid
8.14571488e+01	4.31145744e+00	3.95681619e-01	3.32974434e-03	5.77039370e-02	9.90935458e-01	non-covid

8.36325017e+01	4.35993976e+00	4.02244970e-01	3.70350075e-03	6.08563945e-02	9.90444273e-01	non-covid
6.48301152e+01	3.95995907e+00	3.87037912e-01	3.16925309e-03	5.62961196e-02	9.92832683e-01	non-covid
6.42516012e+01	3.92848140e+00	3.83928598e-01	3.31124966e-03	5.75434589e-02	9.92797016e-01	non-covid
6.83985596e+01	4.03894043e+00	3.88862028e-01	3.26386488e-03	5.71302449e-02	9.92466809e-01	non-covid
7.26000948e+01	4.18637800e+00	3.89398468e-01	3.66196803e-03	6.05141969e-02	9.91949841e-01	non-covid
7.03904388e+01	4.15675265e+00	3.86472008e-01	3.08843529e-03	5.55736924e-02	9.92126859e-01	non-covid
6.58424977e+01	3.97626537e+00	3.96298248e-01	3.33852498e-03	5.77799704e-02	9.92614745e-01	non-covid
7.66255252e+01	4.19250700e+00	3.93378823e-01	2.53473146e-03	5.03461166e-02	9.91550735e-01	non-covid
6.60985039e+01	4.00742278e+00	3.91956644e-01	2.58732754e-03	5.08657797e-02	9.92549893e-01	non-covid
6.93250445e+01	4.06044528e+00	3.99847145e-01	2.45462610e-03	4.95441833e-02	9.92509680e-01	non-covid
2.01523014e+02	6.20111875e+00	5.28394634e-01	1.61783359e-01	4.02223021e-01	9.83552411e-01	non-covid
2.50977768e+02	7.62009720e+00	3.98264822e-01	7.09699952e-02	2.66401943e-01	9.79544634e-01	non-covid
2.42727714e+02	6.98592385e+00	4.72837114e-01	1.12605296e-01	3.35567126e-01	9.80474781e-01	non-covid
2.57954057e+02	7.54620381e+00	4.19823196e-01	7.58190618e-02	2.75352614e-01	9.79197806e-01	non-covid
2.78722798e+02	8.02490017e+00	3.83543899e-01	6.11364264e-02	2.47257814e-01	9.77143212e-01	non-covid
2.35442632e+02	6.24220437e+00	5.08877301e-01	1.18550918e-01	3.44312238e-01	9.81709898e-01	non-covid
3.13026665e+02	8.28919366e+00	3.67440850e-01	4.94424645e-02	2.22356616e-01	9.73985333e-01	non-covid
2.40931955e+02	7.04232886e+00	3.98087689e-01	5.98725417e-02	2.44688663e-01	9.80397806e-01	non-covid
2.87106737e+02	7.68343909e+00	3.99775445e-01	6.45585370e-02	2.54083720e-01	9.76938057e-01	non-covid
2.88598176e+02	7.64809969e+00	4.23858304e-01	8.23516199e-02	2.86969719e-01	9.77152989e-01	non-covid
3.86890485e+02	1.42548793e+01	8.60988756e-02	2.65528776e-04	1.62950537e-02	9.37974359e-01	covid
3.62837259e+02	1.19966185e+01	1.39138786e-01	2.16129298e-03	4.64897083e-02	9.69207675e-01	covid
2.66149541e+02	1.12617294e+01	1.23652386e-01	1.01412071e-03	3.18452620e-02	9.65455898e-01	covid
2.19069799e+02	7.57798062e+00	3.67215453e-01	3.59122866e-02	1.89505374e-01	9.79365584e-01	covid
3.57464805e+02	1.36686647e+01	9.12010637e-02	2.95499985e-04	1.71901130e-02	9.39826396e-01	covid
2.84543690e+02	1.20948049e+01	1.04270952e-01	3.87885533e-04	1.96948098e-02	9.51550413e-01	covid
3.48972812e+02	1.35979721e+01	9.31617579e-02	3.50031286e-04	1.87091231e-02	9.40550933e-01	covid
4.03545502e+02	1.47593092e+01	8.46892924e-02	2.99543401e-04	1.73073222e-02	9.28941648e-01	covid
3.85275510e+02	1.43751563e+01	8.75823595e-02	2.98570970e-04	1.72792063e-02	9.24956652e-01	covid
3.45454787e+02	1.36025338e+01	8.84235733e-02	2.79751209e-04	1.67257648e-02	9.34581048e-01	covid
3.62562809e+02	1.39140746e+01	8.90136892e-02	3.29254428e-04	1.81453693e-02	9.35764802e-01	covid
2.72471086e+02	1.19588451e+01	1.01558241e-01	3.36876951e-04	1.83542080e-02	9.45101405e-01	covid
3.31468281e+02	1.32903302e+01	9.10406134e-02	2.91243549e-04	1.70658592e-02	9.33602042e-01	covid
3.37252986e+02	1.33063122e+01	9.49625518e-02	3.42354571e-04	1.85028260e-02	9.40165615e-01	covid
2.80070972e+02	1.19879431e+01	1.05191910e-01	3.94741350e-04	1.98680988e-02	9.51526098e-01	covid
3.10279434e+02	1.27240003e+01	9.59077829e-02	3.14875417e-04	1.77447293e-02	9.47620727e-01	covid
3.65667444e+02	1.38078158e+01	8.92819294e-02	2.83977339e-04	1.68516272e-02	9.36877469e-01	covid
3.87619024e+02	1.44151500e+01	8.67238042e-02	3.02619150e-04	1.73959521e-02	9.28371621e-01	covid
3.84390790e+02	1.43528824e+01	8.75435183e-02	3.01690048e-04	1.73692270e-02	9.26072381e-01	covid

3.34922387e+02	1.33682444e+01	9.02859945e-02	2.85474679e-04	1.68959959e-02	9.33765081e-01	covid
2.63274253e+02	1.17361221e+01	1.02309768e-01	3.36221225e-04	1.83363362e-02	9.43938240e-01	covid
2.95059013e+02	1.24559895e+01	9.79565174e-02	3.52771637e-04	1.87822160e-02	9.45955844e-01	covid
3.64685627e+02	1.39657813e+01	8.87442647e-02	3.32945226e-04	1.82467867e-02	9.35531190e-01	covid
3.62452516e+02	1.39297476e+01	8.77539840e-02	3.26470767e-04	1.80685021e-02	9.31287104e-01	covid
3.42834934e+02	1.35930025e+01	8.91712712e-02	3.05723784e-04	1.74849588e-02	9.35792977e-01	covid
3.06538502e+02	1.24215204e+01	1.02333804e-01	3.68145060e-04	1.91871066e-02	9.45375723e-01	covid
3.69959355e+02	1.40829760e+01	8.67529477e-02	3.34253349e-04	1.82825969e-02	9.32355300e-01	covid
3.06538502e+02	1.24215204e+01	1.02333804e-01	3.68145060e-04	1.91871066e-02	9.45375723e-01	covid
3.09069196e+02	1.23065727e+01	1.03848012e-01	3.62037982e-04	1.90272957e-02	9.50125068e-01	covid
2.66372532e+02	1.12337975e+01	1.16397337e-01	4.19446780e-04	2.04803999e-02	9.61196283e-01	covid
2.63154360e+02	1.11273613e+01	1.16832154e-01	3.69475055e-04	1.92217339e-02	9.61597560e-01	covid
3.06294096e+02	1.20324743e+01	1.06869298e-01	3.45914922e-04	1.85987882e-02	9.55029953e-01	covid
3.51504779e+02	1.28842846e+01	1.00270738e-01	3.17992102e-04	1.78323330e-02	9.51274546e-01	covid
3.46990248e+02	1.26508276e+01	1.04019544e-01	3.05356345e-04	1.74744484e-02	9.52615827e-01	covid
2.87733178e+02	1.16004891e+01	1.10656670e-01	2.95027899e-04	1.71763762e-02	9.58667155e-01	covid
2.46232601e+02	1.05362371e+01	1.23269249e-01	3.31321467e-04	1.82022380e-02	9.63388129e-01	covid
2.75110694e+02	1.12066879e+01	1.13825786e-01	3.28081231e-04	1.81130128e-02	9.59767969e-01	covid
3.18790215e+02	1.21789845e+01	1.09074438e-01	3.73765896e-04	1.93330260e-02	9.53762521e-01	covid
3.20285355e+02	1.22055366e+01	1.12267795e-01	3.96974219e-04	1.99242119e-02	9.54419713e-01	covid
2.93234418e+02	1.16318253e+01	1.20660026e-01	5.10591019e-04	2.25962612e-02	9.60226719e-01	covid
2.37388629e+02	1.02051971e+01	1.36789175e-01	5.96105885e-04	2.44152797e-02	9.67889341e-01	covid
2.44805496e+02	1.04214522e+01	1.32150981e-01	4.92082118e-04	2.21829240e-02	9.67939431e-01	covid
2.66586532e+02	1.10355311e+01	1.20291154e-01	4.25343978e-04	2.06238691e-02	9.64240544e-01	covid
2.85806607e+02	1.13976431e+01	1.14862187e-01	3.42042274e-04	1.84943849e-02	9.61841737e-01	covid
2.89551796e+02	1.13935721e+01	1.16132965e-01	3.27961835e-04	1.81097166e-02	9.61978411e-01	covid
2.68274787e+02	1.08963238e+01	1.24599579e-01	3.74892166e-04	1.93621323e-02	9.66269767e-01	covid
2.55556403e+02	1.05436293e+01	1.31511166e-01	4.40106794e-04	2.09787224e-02	9.68546700e-01	covid
2.56416562e+02	1.05311679e+01	1.30462472e-01	4.36315316e-04	2.08881621e-02	9.67447805e-01	covid
2.98032906e+02	1.14759169e+01	1.19981829e-01	5.64145902e-04	2.37517558e-02	9.62718198e-01	covid
2.92466242e+02	1.13978925e+01	1.24024751e-01	5.95524430e-04	2.44033692e-02	9.63112793e-01	covid
2.44349713e+02	1.05059194e+01	1.28524865e-01	6.01446965e-04	2.45244157e-02	9.68335610e-01	covid
2.10586756e+02	9.83756079e+00	1.39363532e-01	7.00736319e-04	2.64714246e-02	9.73628245e-01	covid
2.15000073e+02	9.97591861e+00	1.35942103e-01	7.30428325e-04	2.70264375e-02	9.72072485e-01	covid
2.49469143e+02	1.08305791e+01	1.23827189e-01	6.85134362e-04	2.61750714e-02	9.66611389e-01	covid
3.00589488e+02	1.20783569e+01	1.15738956e-01	6.91842670e-04	2.63029023e-02	9.61521506e-01	covid
2.79677410e+02	1.17529713e+01	1.16835901e-01	8.02357666e-04	2.83259186e-02	9.60202272e-01	covid
2.90286025e+02	1.18984472e+01	1.18303458e-01	8.66324159e-04	2.94333851e-02	9.61314921e-01	covid
2.60943815e+02	1.11601678e+01	1.36281347e-01	1.26977699e-03	3.56339304e-02	9.63863090e-01	covid

3.00794459e+02	1.23329293e+01	1.20659680e-01	1.42626512e-03	3.77659254e-02	9.58577564e-01	covid
3.68671488e+02	1.38218894e+01	1.09526015e-01	1.06037813e-03	3.25634478e-02	9.44750088e-01	covid
4.05969064e+02	1.46348439e+01	1.01795346e-01	8.75829358e-04	2.95944143e-02	9.35923190e-01	covid
3.98988633e+02	1.44610843e+01	1.04955213e-01	1.04628299e-03	3.23462980e-02	9.36434989e-01	covid
5.40579995e+01	3.62352416e+00	3.60872091e-01	2.90627080e-03	5.39098396e-02	9.91143827e-01	covid
5.54874504e+01	3.76993962e+00	3.57910345e-01	2.11305369e-03	4.59679637e-02	9.92142837e-01	covid
5.52115708e+01	3.76955836e+00	3.57071592e-01	2.12189447e-03	4.60640258e-02	9.92084066e-01	covid
6.25908778e+01	4.03915903e+00	3.42726578e-01	1.98259403e-03	4.45263296e-02	9.91932330e-01	covid
6.47973361e+01	4.13423742e+00	3.37956312e-01	1.74844632e-03	4.18144271e-02	9.92225407e-01	covid
6.29899753e+01	4.18513766e+00	3.28807419e-01	1.81618863e-03	4.26167647e-02	9.92649204e-01	covid
7.32463472e+01	4.60069635e+00	3.13341598e-01	1.39674308e-03	3.73730261e-02	9.92383414e-01	covid
7.34039365e+01	4.56915069e+00	3.16080942e-01	1.51314344e-03	3.88991445e-02	9.92298319e-01	covid
7.01169398e+01	4.46897728e+00	3.20068341e-01	1.64214878e-03	4.05234350e-02	9.92362593e-01	covid
7.36913689e+01	4.60485093e+00	3.13584290e-01	1.58963361e-03	3.98702096e-02	9.92171881e-01	covid
8.35287173e+01	4.84025394e+00	3.10244481e-01	1.82773304e-03	4.27519945e-02	9.91037884e-01	covid
1.23539470e+02	5.81955214e+00	2.73523463e-01	1.23238239e-03	3.51053043e-02	9.86829513e-01	covid
8.81543793e+01	4.99583046e+00	3.00120318e-01	1.42840105e-03	3.77941934e-02	9.90354885e-01	covid
8.58055512e+01	4.85326515e+00	3.14943306e-01	1.59844094e-03	3.99805071e-02	9.90704883e-01	covid
9.09909593e+01	5.14033873e+00	2.95864275e-01	1.46109930e-03	3.82243287e-02	9.89963274e-01	covid
8.86444243e+01	5.10681412e+00	2.97937885e-01	1.40819012e-03	3.75258593e-02	9.89998671e-01	covid
9.93634864e+01	5.36367174e+00	2.90211869e-01	1.34248522e-03	3.66399402e-02	9.88666276e-01	covid
9.34483923e+01	5.15452944e+00	2.93254977e-01	1.24903015e-03	3.53416206e-02	9.89368008e-01	covid
9.35697618e+01	5.16595041e+00	2.92762264e-01	1.38877854e-03	3.72663191e-02	9.89434539e-01	covid
9.35935561e+01	5.08561337e+00	3.00504240e-01	1.54319104e-03	3.92834703e-02	9.89657244e-01	covid
9.79041119e+01	5.24210969e+00	2.97555076e-01	1.58440592e-03	3.98045967e-02	9.89311549e-01	covid
9.27106368e+01	5.10021390e+00	3.03259229e-01	1.97011757e-03	4.43860065e-02	9.89825951e-01	covid
8.69898755e+01	4.95295877e+00	3.02085012e-01	1.46806331e-03	3.83153143e-02	9.90344115e-01	covid
8.83022940e+01	4.92670037e+00	3.19098905e-01	1.87065445e-03	4.32510629e-02	9.90168160e-01	covid
8.91105727e+01	5.03509562e+00	3.08589491e-01	1.66495665e-03	4.08038804e-02	9.89978555e-01	covid
8.35411688e+01	4.90462319e+00	3.11380273e-01	1.54181424e-03	3.92659425e-02	9.90556595e-01	covid
8.83311888e+01	5.14502526e+00	2.99634815e-01	1.66188494e-03	4.07662230e-02	9.90077776e-01	covid
8.45238971e+01	4.98242250e+00	3.07726383e-01	1.76903489e-03	4.20598965e-02	9.90433363e-01	covid
9.49372226e+01	5.14435466e+00	3.11409412e-01	1.99528193e-03	4.46685788e-02	9.89292108e-01	covid
9.58259487e+01	5.12279431e+00	3.11029653e-01	1.54486670e-03	3.93047923e-02	9.89149231e-01	covid
1.05294194e+02	5.42592304e+00	2.96385407e-01	1.39697499e-03	3.73761287e-02	9.87999273e-01	covid
8.48911541e+01	5.02610546e+00	3.10861310e-01	1.78422106e-03	4.22400409e-02	9.90284183e-01	covid
8.58931564e+01	5.00123038e+00	3.17382472e-01	1.76972764e-03	4.20681310e-02	9.90125770e-01	covid
8.69849302e+01	5.19464073e+00	2.98882931e-01	1.60732843e-03	4.00915007e-02	9.89878123e-01	covid
8.82641484e+01	5.21467281e+00	2.92074584e-01	1.45229378e-03	3.81089725e-02	9.89692301e-01	covid

9.00709617e+01	5.05414169e+00	3.02319074e-01	1.39281912e-03	3.73204919e-02	9.89742749e-01	covid
9.78995792e+01	5.26324940e+00	2.94177195e-01	1.37926801e-03	3.71384977e-02	9.88881657e-01	covid
9.70617169e+01	5.33681067e+00	2.89801092e-01	1.47531487e-03	3.84098278e-02	9.89194805e-01	covid
9.24235859e+01	5.34486782e+00	2.85417223e-01	1.39858108e-03	3.73976080e-02	9.89538587e-01	covid
8.74973615e+01	5.17707965e+00	2.93889615e-01	1.56575895e-03	3.95696720e-02	9.89978374e-01	covid
8.30431931e+01	5.05898754e+00	3.00786618e-01	1.48767663e-03	3.85704113e-02	9.90513962e-01	covid
8.31129022e+01	5.09928558e+00	2.97128781e-01	1.61542426e-03	4.01923408e-02	9.90569474e-01	covid
9.03402199e+01	5.28715148e+00	2.91380696e-01	1.59574987e-03	3.99468381e-02	9.90013224e-01	covid
9.46888769e+01	5.39264547e+00	2.91006403e-01	1.78535109e-03	4.22534151e-02	9.89687912e-01	covid
8.20707741e+01	5.10787210e+00	2.90164222e-01	1.65759930e-03	4.07136255e-02	9.91124378e-01	covid
7.98758840e+01	5.01203527e+00	2.95178053e-01	1.58041429e-03	3.97544248e-02	9.91304440e-01	covid
7.00214286e+01	4.75151739e+00	2.99806644e-01	1.83027376e-03	4.27816989e-02	9.92365297e-01	covid
7.00848309e+01	4.84544279e+00	2.86887608e-01	1.26040229e-03	3.55021449e-02	9.92083668e-01	covid
6.46706467e+01	4.62791003e+00	2.97084472e-01	1.48639135e-03	3.85537462e-02	9.92832824e-01	covid
6.90824140e+01	4.82884491e+00	2.86221372e-01	1.43241505e-03	3.78472595e-02	9.92372477e-01	covid
7.34177109e+01	4.87714657e+00	2.90202248e-01	1.38768544e-03	3.72516502e-02	9.91752756e-01	covid
6.77575421e+01	4.61283793e+00	2.99870895e-01	1.86233301e-03	4.31547565e-02	9.92718410e-01	covid
7.42310966e+01	4.75823825e+00	3.16753807e-01	2.97918249e-03	5.45818879e-02	9.92278644e-01	covid
7.32927659e+01	4.73676788e+00	3.21429883e-01	3.90683919e-03	6.25047134e-02	9.92448400e-01	covid
7.54908571e+01	4.82804407e+00	3.17433215e-01	3.87587870e-03	6.22565555e-02	9.92286228e-01	covid
5.95771511e+01	4.28404611e+00	3.36051379e-01	6.52099761e-03	8.07526941e-02	9.93209791e-01	covid
4.02569308e+01	3.20887592e+00	4.09900846e-01	6.40458310e-03	8.00286393e-02	9.86520499e-01	covid
5.56286083e+01	3.88129482e+00	3.68653202e-01	4.58050239e-03	6.76794089e-02	9.87273527e-01	covid
6.18211733e+01	4.00502472e+00	3.67372148e-01	4.28031590e-03	6.54241232e-02	9.87866364e-01	covid
5.61299355e+01	3.89903304e+00	3.68917350e-01	4.39036704e-03	6.62598448e-02	9.87405544e-01	covid
7.50193938e+01	4.48155921e+00	3.37287747e-01	2.82219157e-03	5.31243030e-02	9.88147879e-01	covid
7.27621214e+01	4.40625527e+00	3.40227181e-01	2.73535265e-03	5.23005990e-02	9.89544577e-01	covid
8.12103040e+01	4.72961216e+00	3.33615329e-01	2.99050209e-03	5.46854834e-02	9.89278903e-01	covid
7.90237215e+01	4.73314607e+00	3.24356961e-01	2.93080155e-03	5.41368779e-02	9.89884653e-01	covid
7.55270066e+01	4.71788114e+00	3.19916371e-01	2.86267085e-03	5.35039331e-02	9.90592307e-01	covid
7.78733003e+01	4.80252224e+00	3.22010843e-01	2.77405622e-03	5.26693101e-02	9.90463662e-01	covid
7.74243225e+01	4.81131047e+00	3.20730160e-01	2.57747410e-03	5.07688300e-02	9.90591583e-01	covid
8.31678968e+01	4.98682046e+00	3.12361468e-01	2.49864015e-03	4.99863997e-02	9.89882323e-01	covid
8.02730978e+01	4.87105030e+00	3.17566679e-01	2.06855989e-03	4.54814235e-02	9.90324873e-01	covid
8.03615638e+01	4.83329483e+00	3.20627542e-01	2.04945320e-03	4.52708869e-02	9.90421526e-01	covid
8.96387104e+01	5.06601529e+00	3.12868470e-01	1.77823330e-03	4.21691036e-02	9.89474137e-01	covid
8.81903950e+01	5.09633591e+00	3.05327850e-01	1.76303573e-03	4.19885190e-02	9.89880397e-01	covid
8.79002899e+01	5.01293801e+00	3.14432516e-01	1.99078906e-03	4.46182593e-02	9.89961236e-01	covid
8.38374938e+01	4.99299720e+00	3.12856316e-01	1.87737589e-03	4.33286959e-02	9.90423497e-01	covid

8.27130611e+01	4.97298770e+00	3.12675272e-01	2.06590947e-03	4.54522768e-02	9.90558517e-01	covid
8.07391528e+01	4.90234028e+00	3.11045289e-01	1.60015439e-03	4.00019299e-02	9.90825937e-01	covid
7.75409358e+01	4.69682506e+00	3.23792666e-01	1.75652291e-03	4.19108926e-02	9.91187141e-01	covid
8.47452136e+01	4.97737221e+00	3.10750131e-01	1.69691180e-03	4.11935893e-02	9.90788885e-01	covid
8.71013725e+01	4.91294118e+00	3.29300654e-01	2.04665620e-03	4.52399845e-02	9.90774419e-01	covid
8.83195063e+01	5.04156904e+00	3.19218598e-01	2.01585344e-03	4.48982566e-02	9.90605269e-01	covid
8.60367002e+01	4.93401773e+00	3.30846423e-01	2.28349179e-03	4.77858953e-02	9.90921358e-01	covid
7.98007639e+01	4.81022373e+00	3.28933117e-01	2.09283862e-03	4.57475531e-02	9.91537610e-01	covid
8.28652118e+01	4.76971559e+00	3.37410738e-01	2.00573524e-03	4.47854356e-02	9.91188454e-01	covid
8.62046343e+01	4.86500983e+00	3.32240810e-01	1.89216628e-03	4.34990377e-02	9.90632563e-01	covid
7.84384624e+01	4.78710525e+00	3.21856221e-01	1.83484946e-03	4.28351429e-02	9.91573179e-01	covid
8.25478791e+01	4.87703702e+00	3.29169304e-01	2.32031997e-03	4.81696997e-02	9.91328489e-01	covid
9.27098190e+01	5.15429051e+00	3.33099371e-01	2.73334047e-03	5.22813588e-02	9.90269500e-01	covid
9.48324530e+01	5.29819622e+00	3.23182921e-01	2.40740525e-03	4.90653162e-02	9.90002051e-01	covid
8.28311114e+01	5.01191746e+00	3.31438196e-01	2.16924105e-03	4.65751120e-02	9.91078185e-01	covid
8.47113378e+01	4.95541456e+00	3.33037421e-01	2.40936759e-03	4.90853093e-02	9.90998178e-01	covid
8.32469330e+01	5.03114860e+00	3.28512623e-01	2.87929914e-03	5.36591011e-02	9.91436326e-01	covid
7.23746201e+01	4.71606978e+00	3.37631282e-01	2.67370040e-03	5.17078369e-02	9.92372214e-01	covid
8.17457928e+01	5.09253993e+00	3.19061350e-01	2.36778793e-03	4.86599212e-02	9.91261335e-01	covid
8.68866067e+01	5.17694749e+00	3.23576671e-01	3.42605633e-03	5.85325237e-02	9.91002678e-01	covid
9.61150351e+01	5.54688145e+00	3.01213727e-01	3.64299384e-03	6.03572186e-02	9.90212908e-01	covid
7.75525661e+01	5.02633961e+00	3.11821143e-01	4.41261526e-03	6.64275189e-02	9.91576155e-01	covid
7.32702712e+01	4.72906746e+00	3.44074132e-01	7.23192032e-03	8.50406980e-02	9.92031173e-01	covid
4.53856245e+01	3.21859933e+00	4.33462603e-01	7.29193319e-03	8.53928169e-02	9.90242847e-01	covid
4.43949999e+01	3.18688017e+00	4.31815020e-01	6.94843076e-03	8.33572478e-02	9.90909540e-01	covid
4.40907455e+01	3.12317893e+00	4.46779507e-01	7.03713138e-03	8.38876116e-02	9.92164911e-01	covid
4.36245388e+01	3.07233601e+00	4.68273073e-01	8.72863290e-03	9.34271529e-02	9.93141049e-01	covid
4.28352178e+01	3.01825963e+00	4.89934595e-01	9.12439354e-03	9.55216915e-02	9.93631506e-01	covid
4.74634365e+01	3.25497358e+00	4.59988101e-01	8.65531317e-03	9.30339356e-02	9.93433471e-01	covid
4.99383490e+01	3.34616278e+00	4.48649789e-01	6.65307109e-03	8.15663600e-02	9.93440286e-01	covid
4.95638386e+01	3.30618401e+00	4.55218429e-01	6.19203231e-03	7.86894676e-02	9.93768388e-01	covid
5.43705934e+01	3.50991926e+00	4.45848483e-01	6.27266287e-03	7.92001444e-02	9.93481309e-01	covid
7.79295937e+01	4.72149280e+00	3.29048942e-01	2.07291529e-03	4.55292794e-02	9.90542582e-01	covid
8.19649008e+01	4.85889220e+00	3.22053162e-01	1.98096033e-03	4.45079805e-02	9.90297924e-01	covid
9.32156231e+01	5.18714250e+00	3.08129836e-01	1.66689883e-03	4.08276723e-02	9.89162921e-01	covid
8.90253511e+01	5.08661802e+00	3.08510586e-01	1.71324144e-03	4.13913208e-02	9.89811032e-01	covid
9.01487571e+01	5.13303321e+00	3.05839626e-01	1.88952018e-03	4.34686114e-02	9.89836436e-01	covid
8.31991234e+01	4.99205184e+00	3.13749892e-01	1.94706917e-03	4.41256067e-02	9.90587750e-01	covid
8.24326586e+01	4.97722630e+00	3.12623732e-01	2.06583821e-03	4.54514929e-02	9.90627318e-01	covid

8.72909816e+01	5.12705513e+00	3.06902898e-01	1.48713740e-03	3.85634205e-02	9.90241829e-01	covid
8.15925468e+01	4.89666889e+00	3.10460211e-01	1.64063102e-03	4.05047037e-02	9.90862701e-01	covid
8.31736379e+01	4.90793651e+00	3.14751859e-01	1.73141903e-03	4.16103236e-02	9.90908673e-01	covid
8.57508013e+01	4.85353962e+00	3.32226833e-01	2.04200970e-03	4.51886014e-02	9.90828769e-01	covid
8.67050698e+01	4.98670002e+00	3.21989599e-01	2.05021286e-03	4.52792763e-02	9.90742581e-01	covid
8.76271630e+01	4.97101432e+00	3.31438876e-01	2.20570644e-03	4.69649491e-02	9.90738864e-01	covid
7.48731644e+01	4.57671250e+00	3.43492943e-01	2.15873375e-03	4.64621755e-02	9.91808116e-01	covid
7.67587317e+01	4.51799096e+00	3.50421574e-01	2.05632733e-03	4.53467456e-02	9.91566325e-01	covid
8.09418640e+01	4.66427171e+00	3.41226723e-01	1.96609173e-03	4.43406329e-02	9.90929088e-01	covid
7.63724662e+01	4.69853768e+00	3.25073535e-01	1.83850144e-03	4.28777500e-02	9.91702151e-01	covid
7.84870747e+01	4.71141869e+00	3.39099415e-01	2.42054453e-03	4.91990298e-02	9.91635155e-01	covid
8.74583026e+01	4.92788687e+00	3.45455553e-01	2.68809922e-03	5.18468824e-02	9.90515475e-01	covid
8.74583026e+01	4.92788687e+00	3.45455553e-01	2.68809922e-03	5.18468824e-02	9.90515475e-01	covid
8.45052702e+01	5.04346553e+00	3.33093538e-01	1.91955577e-03	4.38127352e-02	9.90752782e-01	covid
9.10881730e+01	5.20149393e+00	3.21916826e-01	2.21415364e-03	4.70547940e-02	9.90298403e-01	covid
7.83898762e+01	4.83538306e+00	3.36466095e-01	2.89602866e-03	5.38147625e-02	9.91843903e-01	covid
7.51480248e+01	4.84404002e+00	3.30066346e-01	2.60298485e-03	5.10194556e-02	9.92135159e-01	covid
7.58196283e+01	4.88077124e+00	3.27016477e-01	2.52862719e-03	5.02854571e-02	9.92059658e-01	covid
8.13864828e+01	4.98454387e+00	3.29967474e-01	3.64421814e-03	6.03673599e-02	9.91697252e-01	covid
7.79564317e+01	4.85822382e+00	3.28930470e-01	4.55424706e-03	6.74851617e-02	9.91966005e-01	covid

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contrast	dissimilarity	homogeneity	ASM	energy	correlation	result
5.78474399e+01	3.53110048e+00	4.19021136e-01	3.09365058e-03	5.56205949e-02	9.94577386e-01	non-covid
5.22782069e+01	3.73331059e+00	3.93353774e-01	4.23498504e-03	6.50767627e-02	9.95383887e-01	non-covid
7.19829047e+01	4.06658213e+00	3.88430243e-01	2.54453845e-03	5.04434183e-02	9.92829094e-01	non-covid
4.73554691e+01	3.52882716e+00	4.14146096e-01	2.37866537e-03	4.87715631e-02	9.94220909e-01	non-covid
6.32148746e+01	3.71439204e+00	4.16008573e-01	3.48167960e-03	5.90057591e-02	9.94355157e-01	non-covid
6.52845747e+01	3.73424062e+00	4.18816589e-01	3.65147462e-03	6.04274327e-02	9.94101842e-01	non-covid
6.40219455e+01	3.67834525e+00	4.18814963e-01	3.57056012e-03	5.97541640e-02	9.94035956e-01	non-covid
6.13606652e+01	3.67091483e+00	4.14571122e-01	3.41741234e-03	5.84586378e-02	9.94244866e-01	non-covid
5.70928518e+01	3.48205883e+00	4.29448673e-01	3.33883698e-03	5.77826702e-02	9.94713606e-01	non-covid
6.34559264e+01	3.69962625e+00	4.22862416e-01	3.94268716e-03	6.27908207e-02	9.94002971e-01	non-covid
7.09456443e+01	3.79359664e+00	4.17624765e-01	3.30771545e-03	5.75127416e-02	9.93197565e-01	non-covid
6.90206259e+01	3.77883656e+00	4.17772615e-01	3.38437132e-03	5.81753497e-02	9.93476911e-01	non-covid
6.33300944e+01	3.64321048e+00	4.17870715e-01	2.80455359e-03	5.29580361e-02	9.94085325e-01	non-covid
6.37136330e+01	3.68591072e+00	4.13894323e-01	2.83160332e-03	5.32128117e-02	9.94055643e-01	non-covid
6.88294635e+01	3.84452173e+00	4.10870461e-01	3.11272028e-03	5.57917582e-02	9.93457731e-01	non-covid

6.89337964e+01	3.83457395e+00	4.09630720e-01	3.15171679e-03	5.61401531e-02	9.93386713e-01	non-covid
6.58400806e+01	3.68491148e+00	4.17843689e-01	2.93929967e-03	5.42153085e-02	9.93507846e-01	non-covid
6.63793422e+01	3.69973164e+00	4.09748336e-01	2.92727051e-03	5.41042559e-02	9.93352529e-01	non-covid
6.36394970e+01	3.53445489e+00	4.12465303e-01	2.30205529e-03	4.79797383e-02	9.93772483e-01	non-covid
5.52882751e+01	3.95223207e+00	3.68727574e-01	3.95151258e-03	6.28610577e-02	9.93230210e-01	non-covid
5.49451316e+01	3.85537387e+00	3.80761698e-01	3.00952683e-03	5.48591544e-02	9.93291255e-01	non-covid
6.07789958e+01	4.04279392e+00	3.73143198e-01	3.52244654e-03	5.93502025e-02	9.92672356e-01	non-covid
5.96743493e+01	3.98395757e+00	3.74506047e-01	3.29794174e-03	5.74277088e-02	9.92751599e-01	non-covid
6.47700885e+01	4.22506841e+00	3.66799619e-01	2.90397544e-03	5.38885465e-02	9.91872855e-01	non-covid
6.23760231e+01	4.14950289e+00	3.68028624e-01	2.55284447e-03	5.05256812e-02	9.92201328e-01	non-covid
6.86770663e+01	4.32907629e+00	3.63662578e-01	2.37484372e-03	4.87323683e-02	9.91264783e-01	non-covid
6.38251897e+01	4.06824548e+00	3.76445774e-01	2.48401097e-03	4.98398532e-02	9.91979829e-01	non-covid
6.56334204e+01	4.13998054e+00	3.73042820e-01	2.20903793e-03	4.70004035e-02	9.91678165e-01	non-covid
6.20807732e+01	4.13540112e+00	3.65492951e-01	2.21414593e-03	4.70547121e-02	9.91918484e-01	non-covid
5.62450017e+01	3.88967574e+00	3.76739101e-01	2.26905296e-03	4.76345774e-02	9.92430966e-01	non-covid
5.80702032e+01	3.87427820e+00	3.83027991e-01	2.40652592e-03	4.90563546e-02	9.92273524e-01	non-covid
6.46390990e+01	4.18780154e+00	3.61941276e-01	1.81193080e-03	4.25667804e-02	9.91287165e-01	non-covid
5.24287646e+01	3.67417113e+00	3.88866765e-01	2.06725153e-03	4.54670379e-02	9.92510633e-01	non-covid
5.45897571e+01	3.71698866e+00	3.90416382e-01	2.03450218e-03	4.51054562e-02	9.91405084e-01	non-covid
4.89518242e+01	3.56724734e+00	4.10336016e-01	4.42932870e-03	6.65532021e-02	9.95124891e-01	non-covid
5.98331868e+01	3.68751035e+00	4.10842120e-01	4.01865556e-03	6.33928668e-02	9.94280977e-01	non-covid
6.06926331e+01	3.77135469e+00	4.09255977e-01	3.50562530e-03	5.92083212e-02	9.94001106e-01	non-covid
6.91074633e+01	4.03788281e+00	3.94393130e-01	3.32231400e-03	5.76395177e-02	9.93538700e-01	non-covid
8.15747049e+01	4.20396485e+00	3.95280463e-01	3.09739076e-03	5.56542070e-02	9.91805581e-01	non-covid
7.44689075e+01	4.16119364e+00	3.90766947e-01	2.84713959e-03	5.33585944e-02	9.92562197e-01	non-covid
7.36965754e+01	4.03552491e+00	3.95891597e-01	2.67839040e-03	5.17531680e-02	9.92771204e-01	non-covid
7.12254863e+01	3.93092269e+00	4.04443052e-01	2.82127609e-03	5.31156859e-02	9.93032415e-01	non-covid
6.48631037e+01	3.76840481e+00	4.00435122e-01	2.70145318e-03	5.19755056e-02	9.93352984e-01	non-covid
6.62644576e+01	3.88900171e+00	3.99501248e-01	2.66529434e-03	5.16264888e-02	9.93518281e-01	non-covid
6.92026817e+01	4.08135813e+00	3.74291262e-01	2.23837088e-03	4.73114244e-02	9.92982113e-01	non-covid
6.97302724e+01	3.87094574e+00	4.13090930e-01	2.40172493e-03	4.90073967e-02	9.93255827e-01	non-covid
6.59064735e+01	3.72391081e+00	4.17571414e-01	2.69470096e-03	5.19105092e-02	9.93628157e-01	non-covid
6.59972390e+01	3.79300103e+00	4.04862984e-01	2.75379128e-03	5.24765784e-02	9.93522942e-01	non-covid
5.79420874e+01	3.50529573e+00	4.21424367e-01	2.69568591e-03	5.19199952e-02	9.94433081e-01	non-covid
5.01896400e+01	3.66052092e+00	3.93090059e-01	4.07854918e-03	6.38635199e-02	9.94951574e-01	non-covid
4.80222266e+01	3.54836130e+00	4.08501619e-01	4.50636993e-03	6.71295012e-02	9.95161707e-01	non-covid
5.04810431e+01	3.60753759e+00	4.00144748e-01	3.56181776e-03	5.96809665e-02	9.95186534e-01	non-covid
6.88012406e+01	4.02655129e+00	3.97018829e-01	3.36342413e-03	5.79950354e-02	9.93578996e-01	non-covid
7.53304234e+01	4.21446525e+00	3.83972899e-01	2.92719285e-03	5.41035382e-02	9.92487084e-01	non-covid

7.01166588e+01	4.06607312e+00	3.85520264e-01	2.41829287e-03	4.91761412e-02	9.93007400e-01	non-covid
7.06743763e+01	3.94344145e+00	3.99987015e-01	2.61517123e-03	5.11387449e-02	9.93241950e-01	non-covid
6.69136379e+01	3.85192359e+00	3.97176932e-01	2.73339597e-03	5.22818895e-02	9.93284485e-01	non-covid
6.54392269e+01	3.76709169e+00	4.04444704e-01	2.55390369e-03	5.05361622e-02	9.93492682e-01	non-covid
6.91747699e+01	3.91091887e+00	4.02542942e-01	2.43244391e-03	4.93198125e-02	9.93091802e-01	non-covid
6.90862591e+01	3.87893156e+00	4.01199353e-01	2.78432737e-03	5.27667260e-02	9.93259991e-01	non-covid
6.09593173e+01	3.61615231e+00	4.18475802e-01	2.77705699e-03	5.26977892e-02	9.94095279e-01	non-covid
7.02736491e+01	3.88771733e+00	4.04603557e-01	2.75149834e-03	5.24547266e-02	9.93130224e-01	non-covid
7.02736491e+01	3.88771733e+00	4.04603557e-01	2.75149834e-03	5.24547266e-02	9.93130224e-01	non-covid
6.38697943e+01	3.52068221e+00	4.35361003e-01	2.67632413e-03	5.17332015e-02	9.94076655e-01	non-covid
6.38751978e+01	4.06755507e+00	3.71897600e-01	2.97828130e-03	5.45736319e-02	9.93827040e-01	non-covid
5.95685620e+01	3.94137462e+00	3.75117901e-01	2.94243803e-03	5.42442442e-02	9.94360079e-01	non-covid
6.57305120e+01	4.06168119e+00	3.77160736e-01	2.79112168e-03	5.28310674e-02	9.93773332e-01	non-covid
7.06382384e+01	4.29263782e+00	3.58484534e-01	2.39621777e-03	4.89511775e-02	9.93011459e-01	non-covid
7.93032179e+01	4.29814316e+00	3.76496292e-01	2.89541054e-03	5.38090191e-02	9.92493618e-01	non-covid
8.49280791e+01	4.49342121e+00	3.70488254e-01	2.53031040e-03	5.03021908e-02	9.91730812e-01	non-covid
7.56539043e+01	4.15798884e+00	3.90914072e-01	2.61121379e-03	5.11000371e-02	9.92586379e-01	non-covid
7.19558436e+01	3.88483118e+00	4.08482608e-01	2.65673925e-03	5.15435666e-02	9.93233900e-01	non-covid
7.28654607e+01	3.95243808e+00	4.06920576e-01	2.46704156e-03	4.96693221e-02	9.93038729e-01	non-covid
6.03064965e+01	4.08856337e+00	3.65359049e-01	5.50565320e-03	7.42000889e-02	9.92835921e-01	non-covid
5.78823116e+01	3.93500993e+00	3.73468930e-01	3.37437630e-03	5.80893820e-02	9.93195779e-01	non-covid
6.44756111e+01	4.15262126e+00	3.66921813e-01	4.04939941e-03	6.36348914e-02	9.92627533e-01	non-covid
6.32383312e+01	4.14599241e+00	3.60218914e-01	3.20813498e-03	5.66404006e-02	9.92682210e-01	non-covid
7.80102524e+01	4.51547689e+00	3.42050269e-01	2.04777178e-03	4.52523124e-02	9.90933539e-01	non-covid
7.35057040e+01	4.40361047e+00	3.51670909e-01	2.57092884e-03	5.07043277e-02	9.91351795e-01	non-covid
6.80486886e+01	4.28018381e+00	3.43342546e-01	1.76577665e-03	4.20211453e-02	9.91953366e-01	non-covid
6.60852356e+01	4.24764384e+00	3.57059475e-01	3.30364916e-03	5.74773795e-02	9.92468367e-01	non-covid
7.07790421e+01	4.32113904e+00	3.44780602e-01	1.84738316e-03	4.29811954e-02	9.91657134e-01	non-covid
8.04172632e+01	4.57702564e+00	3.44553722e-01	2.47533356e-03	4.97527241e-02	9.90642608e-01	non-covid
7.21294609e+01	4.42030519e+00	3.38540756e-01	1.69348072e-03	4.11519225e-02	9.91551640e-01	non-covid
7.69135294e+01	4.53075413e+00	3.38504890e-01	1.85050652e-03	4.30175142e-02	9.90878960e-01	non-covid
2.52735163e+02	6.47893211e+00	5.30608244e-01	1.70275669e-01	4.12644725e-01	9.78086970e-01	non-covid
3.14073487e+02	8.06608565e+00	4.19866564e-01	8.74524102e-02	2.95723537e-01	9.72220020e-01	non-covid
2.80152787e+02	7.29214771e+00	4.57893937e-01	1.08308519e-01	3.29102597e-01	9.76563922e-01	non-covid
2.68905887e+02	7.64255850e+00	4.07673914e-01	7.92855420e-02	2.81576885e-01	9.76304094e-01	non-covid
2.58323099e+02	7.27635490e+00	4.35000904e-01	9.65479049e-02	3.10721587e-01	9.77912156e-01	non-covid
2.64400978e+02	7.25809474e+00	4.24044293e-01	8.50690420e-02	2.91665977e-01	9.77135032e-01	non-covid
2.83562284e+02	7.68153330e+00	4.33856950e-01	9.59939922e-02	3.09828972e-01	9.75522531e-01	non-covid
2.98240007e+02	7.03079327e+00	4.94850709e-01	1.41084954e-01	3.75612771e-01	9.75948494e-01	non-covid

2.72522349e+02	7.00040918e+00	4.78670572e-01	1.23164712e-01	3.50948304e-01	9.77885590e-01	non-covid
3.01148589e+02	7.45824562e+00	4.57614159e-01	1.04616869e-01	3.23445310e-01	9.76062250e-01	non-covid
2.32641105e+02	6.31779941e+00	5.31122804e-01	1.78989190e-01	4.23071141e-01	9.79215468e-01	non-covid
2.10735578e+02	7.41419830e+00	2.46215265e-01	1.60569988e-03	4.00711851e-02	9.78277127e-01	non-covid
2.37339441e+02	8.11594653e+00	2.24333046e-01	1.16551149e-03	3.41395883e-02	9.74974053e-01	non-covid
1.94958375e+02	7.24198076e+00	2.42337715e-01	1.52117883e-03	3.90022926e-02	9.79703806e-01	non-covid
2.05417398e+02	7.15738340e+00	2.52942889e-01	1.56073611e-03	3.95061528e-02	9.79639061e-01	non-covid
1.85985527e+02	6.90928231e+00	2.55365994e-01	1.54778820e-03	3.93419395e-02	9.81068525e-01	non-covid
2.09049725e+02	7.46060529e+00	2.31461439e-01	1.23728381e-03	3.51750453e-02	9.78446159e-01	non-covid
2.14411718e+02	7.46144408e+00	2.39624696e-01	1.39690584e-03	3.73752036e-02	9.78317654e-01	non-covid
2.17210104e+02	7.58918735e+00	2.40171484e-01	1.35668442e-03	3.68331973e-02	9.77765325e-01	non-covid
2.25041660e+02	7.62337736e+00	2.29616828e-01	1.37714231e-03	3.71098681e-02	9.77605238e-01	non-covid
2.04255601e+02	7.15397384e+00	2.48213675e-01	1.45228557e-03	3.81088647e-02	9.79881195e-01	non-covid
2.02313764e+02	7.05511060e+00	2.50178654e-01	1.46452720e-03	3.82691417e-02	9.80148371e-01	non-covid
2.18482516e+02	7.31368097e+00	2.50336871e-01	1.15669884e-03	3.40102754e-02	9.78838151e-01	non-covid
2.14490784e+02	7.24739104e+00	2.52929673e-01	1.29825103e-03	3.60312507e-02	9.78321620e-01	non-covid
1.95204026e+02	6.72706802e+00	2.83610208e-01	1.51697073e-03	3.89483084e-02	9.81573398e-01	non-covid
1.86611944e+02	6.37879023e+00	3.07697201e-01	1.75043134e-03	4.18381565e-02	9.82049757e-01	non-covid
1.69075208e+02	6.30138003e+00	2.72444709e-01	1.38626817e-03	3.72326224e-02	9.83242216e-01	non-covid
4.26155471e+01	3.26797746e+00	4.27119533e-01	3.29770117e-03	5.74256142e-02	9.95306580e-01	non-covid
3.87819331e+01	3.11977236e+00	4.36191523e-01	3.35987533e-03	5.79644316e-02	9.95701889e-01	non-covid
4.08608668e+01	3.23749293e+00	4.25079449e-01	3.28072311e-03	5.72775970e-02	9.95567906e-01	non-covid
3.50226595e+01	2.92550446e+00	4.48181860e-01	3.70472326e-03	6.08664378e-02	9.96230088e-01	non-covid
3.51449928e+01	2.98417278e+00	4.37689506e-01	3.35866466e-03	5.79539875e-02	9.96136316e-01	non-covid
3.87154826e+01	3.09393893e+00	4.36568727e-01	3.49996295e-03	5.91604847e-02	9.95875030e-01	non-covid
4.19727302e+01	3.19261736e+00	4.35874808e-01	4.18078496e-03	6.46589898e-02	9.95602831e-01	non-covid
1.95779591e+02	6.43142036e+00	4.41190474e-01	7.75059162e-02	2.78398844e-01	9.85346818e-01	non-covid
2.26692383e+02	6.87085907e+00	4.08830295e-01	6.15038161e-02	2.47999629e-01	9.83254521e-01	non-covid
2.60328289e+02	8.16612667e+00	3.25746042e-01	2.87301985e-02	1.69499848e-01	9.79713677e-01	non-covid
3.06271198e+02	8.87141578e+00	3.11747234e-01	2.77023378e-02	1.66440193e-01	9.75968552e-01	non-covid
2.46865671e+02	7.52017243e+00	3.63276828e-01	3.53784837e-02	1.88091689e-01	9.81746970e-01	non-covid
2.58568932e+02	7.96352549e+00	3.39761881e-01	3.34617136e-02	1.82925432e-01	9.80359043e-01	non-covid
2.63796639e+02	7.87282482e+00	3.42061884e-01	3.57023157e-02	1.88950564e-01	9.79929841e-01	non-covid
2.53122265e+02	7.64862210e+00	3.63948188e-01	4.30586190e-02	2.07505708e-01	9.80929663e-01	non-covid
2.51853617e+02	7.32429496e+00	4.01572528e-01	6.09054802e-02	2.46790357e-01	9.81759562e-01	non-covid
6.67406273e+01	4.17523984e+00	3.66817427e-01	3.15844664e-03	5.62000591e-02	9.93119005e-01	non-covid
6.90236040e+01	4.15513663e+00	3.72786544e-01	3.50721933e-03	5.92217809e-02	9.93187847e-01	non-covid
7.09301954e+01	4.23972850e+00	3.63156295e-01	2.85965359e-03	5.34757290e-02	9.92910900e-01	non-covid
7.70809558e+01	4.41209279e+00	3.57299152e-01	2.25959139e-03	4.75351595e-02	9.91906161e-01	non-covid

6.86913561e+01	4.08675348e+00	3.85322509e-01	2.69279767e-03	5.18921735e-02	9.92795225e-01	non-covid
7.95201101e+01	4.43128862e+00	3.68782454e-01	2.74189221e-03	5.23630806e-02	9.91894503e-01	non-covid
7.59518761e+01	4.23876029e+00	3.81151023e-01	2.75975731e-03	5.25333923e-02	9.92208133e-01	non-covid
6.71384940e+01	3.88787688e+00	4.01421915e-01	2.40202313e-03	4.90104390e-02	9.92862634e-01	non-covid
7.45608094e+01	4.14540642e+00	3.89222705e-01	2.49980189e-03	4.99980189e-02	9.92126261e-01	non-covid
7.24984821e+01	4.06619517e+00	3.95630460e-01	2.10869781e-03	4.59205598e-02	9.92300855e-01	non-covid
7.72994912e+01	4.27942340e+00	3.80936750e-01	2.81564058e-03	5.30626100e-02	9.91777085e-01	non-covid
7.80803653e+01	4.30267693e+00	3.86911955e-01	2.06807846e-03	4.54761307e-02	9.91155701e-01	non-covid
7.64250438e+01	4.22461062e+00	3.97937576e-01	2.41632009e-03	4.91560789e-02	9.91139747e-01	non-covid
6.98892096e+01	4.05796607e+00	3.92351781e-01	2.32423347e-03	4.82103046e-02	9.92112164e-01	non-covid
7.28889320e+01	4.35573285e+00	3.68060180e-01	2.25248606e-03	4.74603630e-02	9.91713136e-01	non-covid
6.98371987e+01	4.08760329e+00	3.88085554e-01	2.35366300e-03	4.85145648e-02	9.92054288e-01	non-covid
6.85640578e+01	4.09497499e+00	3.86968365e-01	2.41120943e-03	4.91040673e-02	9.92216433e-01	non-covid
6.33231073e+01	3.88511415e+00	3.98762744e-01	2.33192487e-03	4.82900080e-02	9.92762149e-01	non-covid
6.72177070e+01	4.00875957e+00	3.83690434e-01	2.36636270e-03	4.86452742e-02	9.92642967e-01	non-covid
6.14080749e+01	4.42448806e+00	3.18934676e-01	1.47299760e-03	3.83796508e-02	9.92158576e-01	non-covid
6.36937581e+01	4.45324612e+00	3.29149253e-01	1.45595677e-03	3.81570016e-02	9.91982189e-01	non-covid
6.20152352e+01	4.40158183e+00	3.26501888e-01	1.38743424e-03	3.72482784e-02	9.92302769e-01	non-covid
6.87662590e+01	4.62228568e+00	3.20709134e-01	1.29119276e-03	3.59331707e-02	9.91433872e-01	non-covid
6.88088484e+01	4.43212524e+00	3.49731462e-01	1.85863350e-03	4.31118719e-02	9.91458305e-01	non-covid
6.79514280e+01	4.11696505e+00	3.83651186e-01	2.77312836e-03	5.26605010e-02	9.91469537e-01	non-covid
8.09110457e+01	4.66876202e+00	3.45269262e-01	1.83188585e-03	4.28005356e-02	9.90116926e-01	non-covid
7.93350888e+01	4.59801463e+00	3.56635805e-01	2.03072057e-03	4.50635170e-02	9.90042743e-01	non-covid
8.32488602e+01	4.81400455e+00	3.38156439e-01	1.71433682e-03	4.14045507e-02	9.89556544e-01	non-covid
6.41573884e+01	4.46736544e+00	3.26704999e-01	1.41819979e-03	3.76589935e-02	9.91951036e-01	non-covid
5.60025216e+01	4.10786330e+00	3.45351209e-01	1.67627039e-03	4.09422812e-02	9.92717246e-01	non-covid
6.52224654e+01	4.35232692e+00	3.45503019e-01	1.81026495e-03	4.25472085e-02	9.91694272e-01	non-covid
7.63316185e+01	4.52359945e+00	3.52582758e-01	2.00068303e-03	4.47289955e-02	9.90736024e-01	non-covid
7.30313978e+01	4.40352688e+00	3.68902685e-01	2.17013672e-03	4.65847263e-02	9.90936359e-01	non-covid
7.62162725e+01	4.52739034e+00	3.55225322e-01	1.86028972e-03	4.31310760e-02	9.90434487e-01	non-covid
7.90889519e+01	4.48084568e+00	3.72332277e-01	2.17412552e-03	4.66275189e-02	9.90188008e-01	non-covid
7.12212177e+01	4.19402374e+00	3.88746398e-01	2.48325427e-03	4.98322613e-02	9.90991299e-01	non-covid
7.31156131e+01	4.29937160e+00	3.79786123e-01	2.34946570e-03	4.84712874e-02	9.91018103e-01	non-covid
8.17067561e+01	4.50347740e+00	3.72121725e-01	2.07864218e-03	4.55921285e-02	9.90081748e-01	non-covid
7.53791792e+01	4.25200539e+00	3.97553890e-01	2.57652364e-03	5.07594685e-02	9.90434593e-01	non-covid
7.58812674e+01	4.33806209e+00	3.80311505e-01	2.34397932e-03	4.84146601e-02	9.90487082e-01	non-covid
7.00995862e+01	4.03799462e+00	4.11994725e-01	2.92372824e-03	5.40715105e-02	9.90897648e-01	non-covid
7.51017925e+01	4.21660638e+00	4.01396110e-01	2.77266489e-03	5.26561002e-02	9.90063640e-01	non-covid
8.68318433e+01	4.53009880e+00	3.60576488e-01	1.81360946e-03	4.25864939e-02	9.89905618e-01	non-covid

8.90397207e+01	4.61247243e+00	3.56658625e-01	1.80501583e-03	4.24854779e-02	9.89830228e-01	non-covid
8.09432133e+01	4.28122612e+00	3.93905245e-01	2.47029532e-03	4.97020655e-02	9.90434138e-01	non-covid
8.12404176e+01	4.33907692e+00	3.78609264e-01	2.20124695e-03	4.69174483e-02	9.90034080e-01	non-covid
7.09411030e+01	4.11692601e+00	3.87790239e-01	2.17907706e-03	4.66805855e-02	9.91012866e-01	non-covid
8.66566162e+01	4.37318411e+00	3.81798642e-01	2.74750127e-03	5.24166126e-02	9.90240216e-01	non-covid
8.90355245e+01	4.46986432e+00	3.80881305e-01	2.87743987e-03	5.36417736e-02	9.90038074e-01	non-covid
8.01855206e+01	4.13192929e+00	3.98703299e-01	2.44676037e-03	4.94647386e-02	9.90946427e-01	non-covid
9.07115887e+01	4.42646439e+00	3.90632222e-01	2.94687373e-03	5.42851152e-02	9.90030867e-01	non-covid
8.54782346e+01	4.27807379e+00	4.05054688e-01	2.82501968e-03	5.31509142e-02	9.90320176e-01	non-covid
8.72353692e+01	4.41587097e+00	3.97675058e-01	3.34353515e-03	5.78233098e-02	9.90250025e-01	non-covid
8.41385403e+01	4.27673919e+00	4.10323083e-01	3.38106543e-03	5.81469296e-02	9.90540990e-01	non-covid
8.26229174e+01	4.21660036e+00	4.20229730e-01	3.82081495e-03	6.18127410e-02	9.90466331e-01	non-covid
8.83888865e+01	4.34519143e+00	4.18645335e-01	3.47766712e-03	5.89717485e-02	9.89981446e-01	non-covid
8.66841358e+01	4.36958788e+00	4.10715579e-01	3.55342300e-03	5.96105947e-02	9.90354052e-01	non-covid
9.19251947e+01	4.46800845e+00	4.08023754e-01	3.66312861e-03	6.05237855e-02	9.89503333e-01	non-covid
7.73011480e+01	4.09844519e+00	4.01112010e-01	3.29057320e-03	5.73635180e-02	9.91449486e-01	non-covid
7.47889983e+01	4.05746521e+00	4.06884373e-01	3.73886019e-03	6.11462198e-02	9.91614377e-01	non-covid
8.52754997e+01	4.35073775e+00	3.94227451e-01	3.29773489e-03	5.74259078e-02	9.90608032e-01	non-covid
8.15668049e+01	4.28777191e+00	4.04252742e-01	3.91382775e-03	6.25605926e-02	9.90957956e-01	non-covid
8.20838773e+01	4.32430631e+00	3.93314544e-01	3.07140921e-03	5.54202960e-02	9.90820452e-01	non-covid
8.36908071e+01	4.37990001e+00	3.91181762e-01	3.18348428e-03	5.64223740e-02	9.90615481e-01	non-covid
7.44582152e+01	4.08909132e+00	4.15428762e-01	2.61497550e-03	5.11368312e-02	9.91789816e-01	non-covid
7.93771374e+01	4.24332379e+00	3.97103829e-01	2.53531395e-03	5.03519011e-02	9.91058528e-01	non-covid
7.63789389e+01	4.13685023e+00	4.16386447e-01	2.74266977e-03	5.23705047e-02	9.91748192e-01	non-covid
1.94704640e+02	5.59645629e+00	5.49785264e-01	1.66772478e-01	4.08377862e-01	9.84100771e-01	non-covid
2.75073090e+02	7.42393048e+00	4.16463763e-01	7.32046566e-02	2.70563591e-01	9.77596647e-01	non-covid
2.20356941e+02	6.23158023e+00	4.94838934e-01	1.16657446e-01	3.41551527e-01	9.82273404e-01	non-covid
2.76847392e+02	7.26652542e+00	4.37930413e-01	7.82962294e-02	2.79814634e-01	9.77690605e-01	non-covid
3.05759576e+02	7.82403412e+00	4.00503770e-01	6.21360857e-02	2.49271109e-01	9.74943564e-01	non-covid
2.61829633e+02	1.07033787e+01	1.26058586e-01	3.64088704e-04	1.90811086e-02	9.58007366e-01]	covid
3.56440846e+02	1.07202097e+01	1.66578018e-01	2.55400853e-03	5.05371994e-02	9.69821381e-01	covid
2.51886920e+02	1.02408658e+01	1.38778078e-01	9.70942377e-04	3.11599483e-02	9.67295808e-01	covid
1.70185136e+02	6.33827900e+00	4.03298514e-01	4.09247163e-02	2.02298582e-01	9.83985334e-01	covid
2.52104339e+02	1.04592977e+01	1.29100205e-01	4.04723105e-04	2.01177311e-02	9.57546384e-01	covid
3.18180557e+02	1.17605128e+01	1.17653034e-01	3.87110503e-04	1.96751240e-02	9.45806303e-01	covid
2.99364954e+02	1.15464726e+01	1.16831756e-01	3.78909340e-04	1.94655938e-02	9.48990658e-01	covid
2.63284027e+02	1.10329730e+01	1.19009329e-01	3.86440927e-04	1.96581008e-02	9.53609970e-01	covid
2.41351379e+02	1.05958536e+01	1.23131281e-01	3.98408269e-04	1.99601671e-02	9.52971306e-01	covid
2.70186384e+02	1.11654245e+01	1.17045210e-01	3.48115002e-04	1.86578402e-02	9.48809803e-01	covid

2.69328433e+02	1.10855208e+01	1.20809332e-01	4.44702910e-04	2.10879802e-02	9.52261476e-01	covid
2.82438725e+02	1.13739957e+01	1.14139335e-01	3.50952426e-04	1.87337243e-02	9.43080647e-01	covid
2.60338839e+02	1.09528940e+01	1.18736430e-01	3.55801962e-04	1.88627135e-02	9.47833667e-01	covid
2.85187466e+02	1.11868450e+01	1.21735465e-01	3.89134690e-04	1.97264972e-02	9.49374562e-01	covid
3.12035659e+02	1.16255252e+01	1.19327647e-01	4.00236654e-04	2.00059155e-02	9.45969663e-01	covid
2.83695274e+02	1.11039178e+01	1.22746277e-01	3.84371705e-04	1.96053999e-02	9.52102478e-01	covid
2.44804311e+02	1.03164632e+01	1.29895442e-01	3.86471587e-04	1.96588806e-02	9.57737631e-01	covid
2.51987107e+02	1.07447231e+01	1.21757459e-01	3.91231390e-04	1.97795700e-02	9.53413507e-01	covid
2.42119377e+02	1.05941575e+01	1.23800150e-01	4.03853911e-04	2.00961168e-02	9.53415130e-01	covid
2.60737208e+02	1.09363379e+01	1.19289066e-01	3.53692278e-04	1.88067083e-02	9.48416308e-01	covid
2.71652739e+02	1.11439665e+01	1.15259542e-01	3.50734582e-04	1.87279092e-02	9.42141113e-01	covid
2.83486997e+02	1.13977191e+01	1.16882682e-01	3.98015029e-04	1.99503140e-02	9.48053362e-01	covid
2.72558074e+02	1.11740478e+01	1.19649494e-01	4.43281737e-04	2.10542570e-02	9.51804390e-01	covid
2.38614465e+02	1.03842361e+01	1.26766284e-01	4.53507544e-04	2.12957166e-02	9.54756037e-01	covid
2.31633358e+02	1.02446851e+01	1.26652830e-01	4.02294810e-04	2.00572882e-02	9.56610860e-01	covid
2.44266475e+02	1.05220965e+01	1.26016501e-01	4.24542495e-04	2.06044290e-02	9.56463750e-01	covid
2.45347478e+02	1.05280236e+01	1.26223890e-01	4.64790687e-04	2.15590048e-02	9.55130204e-01	covid
2.34240305e+02	1.02036138e+01	1.30298077e-01	3.83514657e-04	1.95835303e-02	9.61340122e-01	covid
2.44712116e+02	1.02416255e+01	1.32574391e-01	4.08839155e-04	2.02197714e-02	9.60504578e-01	covid
2.80887854e+02	1.10538302e+01	1.24181311e-01	3.69103728e-04	1.92120724e-02	9.59077804e-01	covid
2.57006636e+02	1.05168617e+01	1.30781016e-01	3.81758948e-04	1.95386527e-02	9.62496581e-01	covid
2.36828927e+02	1.00119670e+01	1.40094512e-01	4.10815326e-04	2.02685798e-02	9.65229292e-01	covid
2.35406342e+02	1.00362934e+01	1.40274764e-01	4.08208025e-04	2.02041586e-02	9.67365711e-01	covid
2.46849175e+02	1.02769096e+01	1.37475541e-01	3.91499108e-04	1.97863364e-02	9.66293312e-01	covid
2.68142465e+02	1.05697888e+01	1.33689651e-01	3.50551993e-04	1.87230337e-02	9.61479483e-01	covid
2.68132448e+02	1.04424546e+01	1.36241029e-01	3.77188994e-04	1.94213541e-02	9.60135254e-01	covid
2.57756030e+02	1.02106631e+01	1.42492328e-01	4.10589546e-04	2.02630093e-02	9.62316741e-01	covid
2.51925495e+02	1.01467775e+01	1.47896175e-01	4.51369031e-04	2.12454473e-02	9.63470859e-01	covid
2.52520933e+02	1.01229865e+01	1.49994280e-01	4.59861423e-04	2.14443797e-02	9.64050550e-01	covid
2.87991084e+02	1.05980068e+01	1.47960202e-01	5.06973433e-04	2.25160705e-02	9.60907532e-01	covid
2.85942004e+02	1.04915011e+01	1.51211365e-01	5.34435414e-04	2.31178592e-02	9.61326092e-01	covid
2.89002144e+02	1.05291878e+01	1.49420131e-01	5.00049693e-04	2.23617909e-02	9.62131853e-01	covid
2.41194991e+02	9.63579612e+00	1.58262417e-01	5.16987530e-04	2.27373598e-02	9.67648138e-01	covid
2.27057472e+02	9.46158204e+00	1.58247538e-01	4.56244085e-04	2.13598709e-02	9.69684635e-01	covid
2.39245331e+02	9.59988883e+00	1.60816353e-01	4.48039350e-04	2.11669400e-02	9.68592698e-01	covid
2.86854080e+02	1.05244678e+01	1.45067153e-01	4.38107625e-04	2.09310206e-02	9.63945638e-01	covid
3.08987359e+02	1.08746502e+01	1.46564710e-01	5.02928829e-04	2.24260748e-02	9.61996271e-01	covid
2.64300951e+02	9.97632164e+00	1.55410826e-01	5.14475756e-04	2.26820580e-02	9.66445710e-01	covid
2.38584620e+02	9.48110112e+00	1.65227236e-01	6.95496495e-04	2.63722675e-02	9.70159020e-01	covid

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2.26230497e+02 9.42147636e+00 1.61844691e-01 6.93090218e-04 2.63266066e-02 9.71474926e-01    covid

2.14969099e+02 9.18923476e+00 1.65243230e-01 7.06745260e-04 2.65846809e-02 9.72141236e-01    covid

2.40288564e+02 9.61020530e+00 1.62341046e-01 8.12635295e-04 2.85067588e-02 9.69902487e-01    covid

2.29101035e+02 9.45060712e+00 1.57987787e-01 7.53095838e-04 2.74425917e-02 9.70238975e-01    covid

1.97068282e+02 8.92799226e+00 1.65946682e-01 8.65983893e-04 2.94276043e-02 9.73615138e-01    covid

2.08055580e+02 9.49738448e+00 1.56832165e-01 9.53356487e-04 3.08764714e-02 9.73365478e-01    covid

1.93082451e+02 9.02284084e+00 1.64029690e-01 1.10219965e-03 3.31993923e-02 9.72519964e-01    covid

2.52520933e+02 1.01229865e+01 1.49994280e-01 4.59861423e-04 2.14443797e-02 9.64050550e-01    covid

2.87991084e+02 1.05980068e+01 1.47960202e-01 5.06973433e-04 2.25160705e-02 9.60907532e-01    covid

2.85942004e+02 1.04915011e+01 1.51211365e-01 5.34435414e-04 2.31178592e-02 9.61326092e-01    covid

2.89002144e+02 1.05291878e+01 1.49420131e-01 5.00049693e-04 2.23617909e-02 9.62131853e-01    covid

2.41194991e+02 9.63579612e+00 1.58262417e-01 5.16987530e-04 2.27373598e-02 9.67648138e-01    covid
```

2. Algoritma

a. Fitur GLCM

```python
import cv2
import numpy as np
import pandas as pd
import csv
from skimage.feature import greycomatrix, greycoprops
#from random import randint #untuk bilangan random

#memasukkan gambar
img = cv2.imread('/content/drive/MyDrive/CT-Scan/COVID/Covid
(X).png')
#mengubah RGB jadi GS
RGB = np.double(img)
GS = RGB[:,:,0]
GS1 = GS.astype(int)
print(GS1)
#matrix_coocurrence = greycomatrix(GS1, [1], [], levels=256,
normed=True, symmetric=True)


glcm = greycomatrix(GS1,
                    distances=[1],
                    angles=[135],
                    levels=256,
                    symmetric=True,
                    normed=True)
print(glcm[:,:,0,0])
```

```python
daftarfitur = ['contrast', 'dissimilarity', 'homogeneity',
'ASM', 'energy', 'correlation']
properties = np.zeros(6)
x=0
for j in range(0, len(daftarfitur)):
    properties[x]=(greycoprops(glcm, prop=daftarfitur[j]))
    x=x+1
print(properties)
np.savetxt('CLCMpasienX.csv', properties, delimiter=',')

print("Writing Done!")
```

b. Klasifikasi

K-NN Fold 5

```
clear
clc
X=readxls('Book3.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.5;
Tet=3;
Kfold=5;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
  mi(1,my)=min(DA0(:,my));
  ma(1,my)=max(DA0(:,my));
end
for mx=1:b
  for my=1:k-1
    DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
  end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
  for my=1:b-1
    if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
      Dum1=DA(my,:);
      Dum2=DA(my+1,:);
      DA(my+1,:)=Dum1;
      DA(my,:)=Dum2;
    end
  end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
```

```
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end

// KFold bekerja

function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL, DU, bl, bu, kl, Tet)
for mx=1:1:bl
  for my=1:1:bu
    J(mx,my)=0;
    for mz=1:1:k-1
    J(mx,my)=J(mx,my)+(DL(mx,mz)-DU(my,mz))^2
    Peng(mx,my)=mx;
  end
end
end
Ja=sqrt(J)
for my=1:1:bu
J1=Ja(:,my);
J1g=gsort(J1)
Jas(:,my)=J1g;
end
for mx=1:1:bl
for mx1=1:1:bl
  for my=1:1:bu
  if Jas(mx1,my) == Ja(mx,my)
    Peng1(mx1,my)=mx;
  end
end
end
end
for mx=1:1:Tet
Peng0(mx,:)=Peng1(bl-mx+1,:)
end
Suara=zeros(2,bu)
for my=1:1:bu
for mx=1:1:Tet
  dum=Peng0(mx,my)
  if DL(dum,7) ==1 // 7 untuk 0 derjajt. Sisa urusanmu.
    Suara(2,my)=Suara(2,my)+1
  end
  if DL(dum,7) ==0 // 7 untuk 0 derjajt. Sisa urusanmu.
    Suara(1,my)=Suara(1,my)+1
  end

end
end
PCM(:,1)=DU(:,7)
for my=1:1:bu
if Suara(1,my)>Suara(2,my)
  PCM(my,2)=0;
end
if Suara(1,my)<Suara(2,my)
  PCM(my,2)=1;
```

```
        end
      end
// PCM kolom 1: data aktual, PCM kolom 2 data prdiksi.
CM=zeros(2,2)
//    DP0 DP1
// DA0
// DA1
for mx=1:1:bu
if PCM(mx,1) == 0
   if PCM (mx,2) == 0
      CM(1,1)=CM(1,1)+1
   end
   end
if PCM(mx,1) == 1
   if PCM (mx,2) == 0
      CM(2,1)=CM(2,1)+1
   end
   end
if PCM(mx,1) == 0
   if PCM (mx,2) == 1
      CM(1,2)=CM(1,2)+1
   end
end
if PCM(mx,1) == 1
   if PCM (mx,2) == 1
      CM(2,2)=CM(2,2)+1
   end
   end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

DU=[K1;K2;K3;K4;K5];
DL=[K2;K3;K4;K5];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,kl,Tet)
CM1=CM;
Akurasi1=Akurasi;
Presisi1=Presisi
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K3;K4;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,kl,Tet)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,kl,Tet)
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
```

```
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S;
DL=[K1;K2;K3;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,kl,Tet)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,kl,Tet)
CM5=CM
Akurasi5=Akurasi;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5)/5;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5)/5;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;
//kol 8: bil acak
// kol 9 0: data latih 1: data uji
```

K-NN Fold 7

```
clear
clc
X=readxls('Book3.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.5;
Tet=3;
Kfold=7;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
  mi(1,my)=min(DA0(:,my));
  ma(1,my)=max(DA0(:,my));
end
for mx=1:b
  for my=1:k-1
    DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
  end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
  for my=1:b-1
    if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
      Dum1=DA(my,:);
      Dum2=DA(my+1,:);
      DA(my+1,:)=Dum1;
```

```
        DA(my,:)=Dum2;
      end
    end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end
for my=1+DdK*5:1:DdK*6
K6(my-DdK*5,:)=DA(my,:);
end
for my=1+DdK*6:1:DdK*7
K7(my-DdK*6,:)=DA(my,:);
end
// KFold bekerja

function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL, DU, bl, bu, ku, kl, Tet)
for mx=1:1:bl
  for my=1:1:bu
    J(mx,my)=0;
    for mz=1:1:k-1
    J(mx,my)=J(mx,my)+(DL(mx,mz)-DU(my,mz))^2
    Peng(mx,my)=mx;
  end
end
end
Ja=sqrt(J)
for my=1:1:bu
J1=Ja(:,my);
J1g=gsort(J1)
Jas(:,my)=J1g;
end
for mx=1:1:bl
for mx1=1:1:bl
  for my=1:1:bu
  if Jas(mx1,my) == Ja(mx,my)
    Peng1(mx1,my)=mx;
  end
end
end
end
for mx=1:1:Tet
Peng0(mx,:)=Peng1(bl-mx+1,:)
end
Suara=zeros(2,bu)
for my=1:1:bu
for mx=1:1:Tet
  dum=Peng0(mx,my)
  if DL(dum,7) ==1 // 7 untuk 0 derjat. Sisa urusanmu.
    Suara(2,my)=Suara(2,my)+1
  end
```

```
    if DL(dum,7) ==0 // 7 untuk 0 derjajt. Sisa urusanmu.
      Suara(1,my)=Suara(1,my)+1
    end

end
end
PCM(:,1)=DU(:,7)
for my=1:1:bu
if Suara(1,my)>Suara(2,my)
  PCM(my,2)=0;
end
if Suara(1,my)<Suara(2,my)
  PCM(my,2)=1;
end
end
// PCM kolom 1: data aktual, PCM kolom 2 data prdiksi.
CM=zeros(2,2)
//     DP0 DP1
// DA0
// DA1
for mx=1:1:bu
if PCM(mx,1) == 0
  if PCM (mx,2) == 0
    CM(1,1)=CM(1,1)+1
  end
  end
if PCM(mx,1) == 1
  if PCM (mx,2) == 0
    CM(2,1)=CM(2,1)+1
  end
  end
if PCM(mx,1) == 0
  if PCM (mx,2) == 1
    CM(1,2)=CM(1,2)+1
  end
end
if PCM(mx,1) == 1
  if PCM (mx,2) == 1
    CM(2,2)=CM(2,2)+1
  end
  end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

DU=[K1;K2;K3;K4;K5;K6;K7];
DL=[K2;K3;K4;K5;K6;K7];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
F1S1=F1S;
DL=[K1;K3;K4;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM1=CM
Akurasi1=Akurasi;
Presisi1=Presisi
```

```
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K2;K4;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S
DL=[K1;K2;K3;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM5=CM
Akurasi5=Akurasi;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;
DL=[K1;K2;K3;K4;K5;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM6=CM
Akurasi6=Akurasi;
Presisi6=Presisi
Recall6=Recall;
Spesifitas6=Spesifitas;
F1S6=F1S;
DL=[K1;K2;K3;K4;K5;K6];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM7=CM
Akurasi7=Akurasi;
Presisi7=Presisi
Recall7=Recall;
Spesifitas7=Spesifitas;
F1S7=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5+CM6+CM7)/7;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5++Akurasi6+Akurasi7)/7;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;
//kol 8: bil acak
// kol 9 0: data latih 1: data uji
```

K-NN Fold 10

```
clear
```

```
clc
X=readxls('Book2.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.5;
Tet=3;
Kfold=10;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
 mi(1,my)=min(DA0(:,my));
 ma(1,my)=max(DA0(:,my));
end
for mx=1:b
  for my=1:k-1
    DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
  end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
  for my=1:b-1
    if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
      Dum1=DA(my,:);
      Dum2=DA(my+1,:);
      DA(my+1,:)=Dum1;
      DA(my,:)=Dum2;
    end
  end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end
for my=1+DdK*5:1:DdK*6
K6(my-DdK*5,:)=DA(my,:);
end
for my=1+DdK*6:1:DdK*7
K7(my-DdK*6,:)=DA(my,:);
end
for my=1+DdK*7:1:DdK*8
K8(my-DdK*7,:)=DA(my,:);
end
for my=1+DdK*8:1:DdK*9
K9(my-DdK*8,:)=DA(my,:);
```

```
    end
for my=1+DdK*9:1:DdK*10
K10(my-DdK*9,:)=DA(my,:);
    end
// KFold bekerja
function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL, DU, bl, bu, ku, kl, Tet)
for mx=1:1:bl
  for my=1:1:bu
    J(mx,my)=0;
    for mz=1:1:k-1
    J(mx,my)=J(mx,my)+(DL(mx,mz)-DU(my,mz))^2
    Peng(mx,my)=mx;
  end
end
end
Ja=sqrt(J)
for my=1:1:bu
J1=Ja(:,my);
J1g=gsort(J1)
Jas(:,my)=J1g;
end
for mx=1:1:bl
for mx1=1:1:bl
  for my=1:1:bu
  if Jas(mx1,my) == Ja(mx,my)
    Peng1(mx1,my)=mx;
  end
end
end
end
for mx=1:1:Tet
Peng0(mx,:)=Peng1(bl-mx+1,:)
end
Suara=zeros(2,bu)
for my=1:1:bu
for mx=1:1:Tet
  dum=Peng0(mx,my)
  if DL(dum,7) ==1 // 7 untuk 0 derjajt. Sisa urusanmu.
    Suara(2,my)=Suara(2,my)+1
  end
  if DL(dum,7) ==0 // 7 untuk 0 derjajt. Sisa urusanmu.
    Suara(1,my)=Suara(1,my)+1
  end

end
end
PCM(:,1)=DU(:,7)
for my=1:1:bu
if Suara(1,my)>Suara(2,my)
  PCM(my,2)=0;
end
if Suara(1,my)<Suara(2,my)
  PCM(my,2)=1;
end
end
// PCM kolom 1: data aktual, PCM kolom 2 data prdiksi.
CM=zeros(2,2)
//     DP0 DP1
// DA0
// DA1
for mx=1:1:bu
if PCM(mx,1) == 0
  if PCM (mx,2) == 0
    CM(1,1)=CM(1,1)+1
```

```
    end
    end
if PCM(mx,1) == 1
  if PCM (mx,2) == 0
    CM(2,1)=CM(2,1)+1
  end
  end
if PCM(mx,1) == 0
  if PCM (mx,2) == 1
    CM(1,2)=CM(1,2)+1
  end
end
if PCM(mx,1) == 1
  if PCM (mx,2) == 1
    CM(2,2)=CM(2,2)+1
  end
  end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

DU=[K1;K2;K3;K4;K5;K6;K7;K8;K9;K10];
DL=[K2;K3;K4;K5;K6;K7;K8;K9;K10];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
F1S1=F1S;
DL=[K1;K3;K4;K5;K6;K7;;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM1=CM
Akurasi1=Akurasi;
Presisi1=Presisi
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K2;K4;K5;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S;
DL=[K1;K2;K3;K5;K6;K7;;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
```

```
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM5=CM
Akurasi5=Akurasi;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;
DL=[K1;K2;K3;K4;K5;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM6=CM
Akurasi6=Akurasi;
Presisi6=Presisi
Recall6=Recall;
Spesifitas6=Spesifitas;
F1S6=F1S;
DL=[K1;K2;K3;K4;K5;K6;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM7=CM
Akurasi7=Akurasi;
Presisi7=Presisi
Recall7=Recall;
Spesifitas7=Spesifitas;
F1S7=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM8=CM
Akurasi8=Akurasi;
Presisi8=Presisi
Recall8=Recall;
Spesifitas8=Spesifitas;
F1S8=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K8;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM9=CM
Akurasi9=Akurasi;
Presisi9=Presisi
Recall9=Recall;
Spesifitas9=Spesifitas;
F1S9=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K8;K9];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=KNN(DL,DU,bl,bu,ku,kl,Tet)
CM10=CM
Akurasi10=Akurasi;
Presisi10=Presisi
Recall10=Recall;
Spesifitas10=Spesifitas;
F1S10=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5+CM6+CM7+CM8+CM9+CM10)/10;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5++Akurasi6+Akurasi7+Akurasi8+Akurasi9+
Akurasi10)/10;
PresisiRata=Presisi10;
RecallRata=Recall10;
SpesifitasRata=Spesifitas10;
F1S10=F1S;
//kol 8: bil acak
// kol 9 0: data latih 1: data uji
```

NB Fold 5

```
clear
clc
X=readxls('Book3.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.5;
Tet=3;
Kfold=5;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
  mi(1,my)=min(DA0(:,my));
  ma(1,my)=max(DA0(:,my));
end
for mx=1:b
  for my=1:k-1
    DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
  end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
  for my=1:b-1
    if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
      Dum1=DA(my,:);
      Dum2=DA(my+1,:);
      DA(my+1,:)=Dum1;
      DA(my,:)=Dum2;
    end
  end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end

function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL, DU, bl, bu, ku, kl)
  ml=1
mu=1
for mx=1:1:bl
  if DL(mx,7)<0.5
    for my=1:1:kl
    DL0(ml,my)=DL(mx,my);
  end
```

```matlab
    ml=ml+1;
    end
    if DL(mx,7)>0.5
      for my=1:1:kl
      DL1(mu,my)=DL(mx,my);
    end
    mu=mu+1
    end
end
for my=1:1:kl-2
    dum0=DL0(:,my)
    rata0(1,my)=mean(dum0);
    std0(1,my)=stdev(dum0);
    dum1=DL1(:,my)
    rata1(1,my)=mean(dum1);
    std1(1,my)=stdev(dum1);
end
[bl0 kl0]=size(DL0);
[bl1 kl1]=size(DL1);
PKj0=bl0/(bl1+bl0)
PKj1=bl1/(bl1+bl0)
for mx=1:1:bu
    for my=1:1:ku-2
      z0=(DU(mx,my)-rata0(1,my));
      z1=(4*std0(1,my));
      z2=2*22/7*std0(1,my)*std0(1,my);
      L0(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
      z0=(DU(mx,my)-rata1(1,my));
      z1=(4*std1(1,my));
      z2=2*22/7*std1(1,my)*std1(1,my);
      L1(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
      end
end
    L0(:,ku-1)=PKj0
    L1(:,ku-1)=PKj1
    Pas0=ones(bu,1)
    Pas1=ones(bu,1)
for mx=1:1:bu
    for my=1:1:ku-1
Pas0(mx,1)=Pas0(mx,1)*L0(mx,my);
Pas1(mx,1)=Pas1(mx,1)*L1(mx,my);
    end
end
P0=Pas0./(Pas1+Pas0)
P1=Pas1./(Pas1+Pas0)
PCM(:,1)=DA(:,7);
for mx=1:bu
    if P0(mx,1)>P1(mx,1)
      PCM(mx,2)=0;
    end
      if P0(mx,1)<P1(mx,1)
      PCM(mx,2)=1;
      end
end
CM=zeros(2,2)
for mx=1:1:bu
if PCM(mx,1) == 0
    if PCM(mx,2) == 0
      CM(1,1)=CM(1,1)+1
    end
    end
if PCM(mx,1) == 1
    if PCM (mx,2) == 0
      CM(2,1)=CM(2,1)+1
```

```
      end
      end
if PCM(mx,1) == 0
   if PCM(mx,2) == 1
      CM(1,2)=CM(1,2)+1
   end
end
if PCM(mx,1) == 1
   if PCM(mx,2) == 1
      CM(2,2)=CM(2,2)+1
   end
   end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

//DIGANDAKAN SESUAI KFold
DU=[K1;K2;K3;K4;K5];
DL=[K2;K3;K4;K5];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM1=CM;
Akurasi1=Akurasi;
Presisi1=Presisi
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K3;K4;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S;
DL=[K1;K2;K3;K5];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM5=CM
Akurasi5=Akurasi;
```

```
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5)/5;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5)/5;
//PresisiRata=Presisi
//Recall5=Recall;
//Spesifitas5=Spesifitas;
//F1S5=F1S;


NB Fold 7 clear
clc
X=readxls('Derajat0.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.5;
Tet=3;
Kfold=10;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
  mi(1,my)=min(DA0(:,my));
  ma(1,my)=max(DA0(:,my));
end
for mx=1:b
   for my=1:k-1
     DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
   end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
   for my=1:b-1
     if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
        Dum1=DA(my,:);
        Dum2=DA(my+1,:);
        DA(my+1,:)=Dum1;
        DA(my,:)=Dum2;
     end
   end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
```

```
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end
for my=1+DdK*5:1:DdK*6
K6(my-DdK*5,:)=DA(my,:);
end
for my=1+DdK*6:1:DdK*7
K7(my-DdK*6,:)=DA(my,:);
end
function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL, DU, bl, bu, ku, kl)
    ml=1
mu=1
for mx=1:1:bl
    if DL(mx,7)<0.5
        for my=1:1:kl
        DL0(ml,my)=DL(mx,my);
    end
    ml=ml+1;
    end
    if DL(mx,7)>0.5
        for my=1:1:kl
        DL1(mu,my)=DL(mx,my);
    end
    mu=mu+1
    end
end
for my=1:1:kl-2
    dum0=DL0(:,my)
    rata0(1,my)=mean(dum0);
    std0(1,my)=stdev(dum0);
    dum1=DL1(:,my)
    rata1(1,my)=mean(dum1);
    std1(1,my)=stdev(dum1);
end
[bl0 kl0]=size(DL0);
[bl1 kl1]=size(DL1);
PKj0=bl0/(bl1+bl0)
PKj1=bl1/(bl1+bl0)
for mx=1:1:bu
    for my=1:1:ku-2
        z0=(DU(mx,my)-rata0(1,my));
        z1=(4*std0(1,my));
        z2=2*22/7*std0(1,my)*std0(1,my);
        L0(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
        z0=(DU(mx,my)-rata1(1,my));
        z1=(4*std1(1,my));
        z2=2*22/7*std1(1,my)*std1(1,my);
        L1(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
        end
end
    L0(:,ku-1)=PKj0
    L1(:,ku-1)=PKj1
    Pas0=ones(bu,1)
    Pas1=ones(bu,1)
for mx=1:1:bu
    for my=1:1:ku-1
Pas0(mx,1)=Pas0(mx,1)*L0(mx,my);
Pas1(mx,1)=Pas1(mx,1)*L1(mx,my);
    end
end
P0=Pas0./(Pas1+Pas0)
P1=Pas1./(Pas1+Pas0)
PCM(:,1)=DA(:,7);
```

```
for mx=1:bu
  if P0(mx,1)>P1(mx,1)
    PCM(mx,2)=0;
  end
  if P0(mx,1)<P1(mx,1)
    PCM(mx,2)=1;
    end
end
CM=zeros(2,2)
for mx=1:1:bu
if PCM(mx,1) == 0
  if PCM(mx,2) == 0
    CM(1,1)=CM(1,1)+1
  end
  end
if PCM(mx,1) == 1
  if PCM (mx,2) == 0
    CM(2,1)=CM(2,1)+1
  end
  end
if PCM(mx,1) == 0
  if PCM(mx,2) == 1
    CM(1,2)=CM(1,2)+1
  end
end
if PCM(mx,1) == 1
  if PCM(mx,2) == 1
    CM(2,2)=CM(2,2)+1
  end
  end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

//DIGANDAKAN SESUAI KFold
DU=[K1;K2;K3;K4;K5;K6;K7];
DL=[K2;K3;K4;K5;K6;K7];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM1=CM;
Akurasi1=Akurasi;
Presisi1=Presisi
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K3;K4;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
```

```
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S;
DL=[K1;K2;K3;K5;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4;K6;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM5=CM
Akurasi5=Akurasi;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
F1S5=F1S;
DL=[K1;K2;K3;K4;K5;K7];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM6=CM
Akurasi6=Akurasi;
Presisi6=Presisi
Recall6=Recall;
Spesifitas6=Spesifitas;
F1S6=F1S;
DL=[K1;K2;K3;K4;K5;K6];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM7=CM
Akurasi7=Akurasi;
Presisi7=Presisi
Recall7=Recall;
Spesifitas7=Spesifitas;
F1S7=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5+CM6+CM7)/7;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5++Akurasi6+Akurasi7)/7;
//PresisiRata=Presisi
//Recall5=Recall;
//Spesifitas5=Spesifitas;
//F1S5=F1S;
```

NB Fold 10
```
clear
clc
X=readxls('Book2.xls')
typeof(X);
x1=X(1);
typeof(x1)
X1=x1.value;
Nama=['contras','dissimilarity','homogeneity','ASM','energy','correlation','result']
Rasio=0.8;
Tet=3;
Kfold=10;
DA0=X1;
[b k]=size(X1);
for my=1:1:k-1
 mi(1,my)=min(DA0(:,my));
 ma(1,my)=max(DA0(:,my));
```

```
end
for mx=1:b
  for my=1:k-1
    DA(mx,my)=(DA0(mx,my)-mi(1,my))/(ma(1,my)-mi(1,my));
  end
end
DA(:,k)=DA0(:,k);
for mx= 1:b
DA(mx,8)=rand(1.1);
end
DA2=DA;
for mx=1:b
  for my=1:b-1
    if DA(my+1,8)<DA(my,8) // 8 mengikuti jumlah input
      Dum1=DA(my,:);
      Dum2=DA(my+1,:);
      DA(my+1,:)=Dum1;
      DA(my,:)=Dum2;
    end
  end
end
DdK=floor(b/Kfold);
//DIGANDAKAN SESUAI KFold
for my=1:1:DdK*1
K1(my,:)=DA(my,:);
end
for my=1+DdK*1:1:DdK*2
K2(my-DdK*1,:)=DA(my,:);
end
for my=1+DdK*2:1:DdK*3
K3(my-DdK*2,:)=DA(my,:);
end
for my=1+DdK*3:1:DdK*4
K4(my-DdK*3,:)=DA(my,:) ;
end
for my=1+DdK*4:1:DdK*5
K5(my-DdK*4,:)=DA(my,:);
end
for my=1+DdK*5:1:DdK*6
K6(my-DdK*5,:)=DA(my,:);
end
for my=1+DdK*6:1:DdK*7
K7(my-DdK*6,:)=DA(my,:);
end
for my=1+DdK*7:1:DdK*8
K8(my-DdK*7,:)=DA(my,:);
end
for my=1+DdK*8:1:DdK*9
K9(my-DdK*8,:)=DA(my,:);
end
for my=1+DdK*9:1:DdK*10
K10(my-DdK*9,:)=DA(my,:);
end
function [CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL, DU, bl, bu, ku, kl)
  ml=1
mu=1
for mx=1:1:bl
  if DL(mx,7)<0.5
    for my=1:1:kl
    DL0(ml,my)=DL(mx,my);
  end
  ml=ml+1;
  end
  if DL(mx,7)>0.5
```

```matlab
        for my=1:1:kl
        DL1(mu,my)=DL(mx,my);
      end
    mu=mu+1
    end
end
for my=1:1:kl-2
  dum0=DL0(:,my)
  rata0(1,my)=mean(dum0);
  std0(1,my)=stdev(dum0);
  dum1=DL1(:,my)
  rata1(1,my)=mean(dum1);
  std1(1,my)=stdev(dum1);
end
[bl0 kl0]=size(DL0);
[bl1 kl1]=size(DL1);
PKj0=bl0/(bl1+bl0)
PKj1=bl1/(bl1+bl0)
for mx=1:1:bu
  for my=1:1:ku-2
    z0=(DU(mx,my)-rata0(1,my));
    z1=(4*std0(1,my));
    z2=2*22/7*std0(1,my)*std0(1,my);
    L0(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
    z0=(DU(mx,my)-rata1(1,my));
    z1=(4*std1(1,my));
    z2=2*22/7*std1(1,my)*std1(1,my);
    L1(mx,my)=exp(-(z0/z1)^2)/sqrt(z2);
    end
end
    L0(:,ku-1)=PKj0
    L1(:,ku-1)=PKj1
    Pas0=ones(bu,1)
    Pas1=ones(bu,1)
for mx=1:1:bu
  for my=1:1:ku-1
Pas0(mx,1)=Pas0(mx,1)*L0(mx,my);
Pas1(mx,1)=Pas1(mx,1)*L1(mx,my);
  end
end
P0=Pas0./(Pas1+Pas0)
P1=Pas1./(Pas1+Pas0)
PCM(:,1)=DA(:,7);
for mx=1:bu
  if P0(mx,1)>P1(mx,1)
    PCM(mx,2)=0;
  end
   if P0(mx,1)<P1(mx,1)
    PCM(mx,2)=1;
    end
end
CM=zeros(2,2)
for mx=1:1:bu
if PCM(mx,1) == 0
  if PCM(mx,2) == 0
    CM(1,1)=CM(1,1)+1
  end
  end
if PCM(mx,1) == 1
  if PCM (mx,2) == 0
    CM(2,1)=CM(2,1)+1
  end
  end
if PCM(mx,1) == 0
```

```
  if PCM(mx,2) == 1
     CM(1,2)=CM(1,2)+1
  end
end
if PCM(mx,1) == 1
  if PCM(mx,2) == 1
     CM(2,2)=CM(2,2)+1
  end
   end
end
TP=CM(1,1)
FN=CM(1,2)
FP=CM(2,1)
TN=CM(2,2)
Akurasi=(TP+TN)/(TP+TN+FP+FN)
Presisi=TP/(TP+FP)
Recall=TP/(TP+FN)
Spesifitas=(TN)/(TN+FP)
F1S=(2*Presisi*Recall)/(Presisi+Recall)
endfunction

//DIGANDAKAN SESUAI KFold
DU=[K1;K2;K3;K4;K5;K6;K7;K8;K9;K10];
DL=[K2;K3;K4;K5;K6;K7;K8;K9;K10];
[bl kl]=size(DL);
[bu ku]=size(DU);
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM1=CM;
Akurasi1=Akurasi;
Presisi1=Presisi
Recall1=Recall;
Spesifitas1=Spesifitas;
F1S1=F1S;
DL=[K1;K3;K4;K5;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM2=CM
Akurasi2=Akurasi;
Presisi2=Presisi
Recall2=Recall;
Spesifitas2=Spesifitas;
F1S2=F1S;
DL=[K1;K2;K4;K5;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM3=CM;
Akurasi3=Akurasi;
Presisi3=Presisi
Recall3=Recall;
Spesifitas3=Spesifitas;
F1S3=F1S;
DL=[K1;K2;K3;K5;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM4=CM
Akurasi4=Akurasi;
Presisi4=Presisi
Recall4=Recall;
Spesifitas4=Spesifitas;
F1S4=F1S;
DL=[K1;K2;K3;K4;K6;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM5=CM
Akurasi5=Akurasi;
Presisi5=Presisi
Recall5=Recall;
Spesifitas5=Spesifitas;
```

```
F1S5=F1S;
DL=[K1;K2;K3;K4;K5;K7;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM6=CM
Akurasi6=Akurasi;
Presisi6=Presisi
Recall6=Recall;
Spesifitas6=Spesifitas;
F1S6=F1S;
DL=[K1;K2;K3;K4;K5;K6;K8;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM7=CM
Akurasi7=Akurasi;
Presisi7=Presisi
Recall7=Recall;
Spesifitas7=Spesifitas;
F1S7=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K9;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM8=CM
Akurasi8=Akurasi;
Presisi8=Presisi
Recall8=Recall;
Spesifitas8=Spesifitas;
F1S8=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K8;K10];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM9=CM
Akurasi9=Akurasi;
Presisi9=Presisi
Recall9=Recall;
Spesifitas9=Spesifitas;
F1S9=F1S;
DL=[K1;K2;K3;K4;K5;K6;K7;K8;K9];
[CM, Akurasi, Presisi, Recall, Spesifitas, F1S]=NB(DL,DU,bl,bu,ku,kl)
CM10=CM
Akurasi10=Akurasi;
Presisi10=Presisi
Recall10=Recall;
Spesifitas10=Spesifitas;
F1S10=F1S;

CMRata=(CM1+CM2+CM3+CM4+CM5+CM6+CM7+CM8+CM9+CM10)/10;
AkurasiRata=(Akurasi1+Akurasi2+Akurasi3+Akurasi4+Akurasi5++Akurasi6+Akurasi7+Akurasi8+Akurasi9+
Akurasi10)/10;
//PresisiRata=Presisi
//Recall5=Recall;
//Spesifitas5=Spesifitas;
//F1S5=F1S;
```

3. Perhitungan

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Penjabaran lebih lanjut rumus *Bayes* tersebut dilakukan dengan menjabarkan $(C|F1, ..., Fn)$ menggunakan aturan perkalian sebagai berikut:

$P(C|F_1, ..., F_n = P(C)P(F_1, ..., F_n|C)$

$= P(C)P(F_1|C)P(F_2, ..., F_n|C, F_1)$

$= P(C)P(F_1|C)P(F_2|C, F_1)P(F_3, ..., F_n|C, F_1, F_2$

$= (C)P(F_1|C)P(F_2|C, F_1)P(F_3|C, F_1, F_2)P(F_4, ..., F_n|C, F_1, F_2, F_3)$

$= P(C)P(F_1|C)P(F_2|C, F_1)P(F_3|C, F_1, F_2) ... P(F_n|C, F_1, F_2, F_3, ..., F_{n-1})$

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$$Matrix\ coocurance\ A_{8\times8} = \begin{bmatrix} 2528 & 89 & \cdots & 5 & 0 \\ 69 & 558 & \cdots & 6 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 7 & 5 & \cdots & 6653 & 41 \\ 0 & 0 & \cdots & 41 & 444 \end{bmatrix}$$

$$Transpose\ coocurance\ A'_{8\times8} = \begin{bmatrix} 2528 & 69 & \cdots & 7 & 0 \\ 89 & 558 & \cdots & 5 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 5 & 6 & \cdots & 6653 & 41 \\ 0 & 0 & \cdots & 41 & 444 \end{bmatrix}$$

$Matriks\ Simetris = Matriks\ CoOccurance + Matriks\ Transpose$

$$\begin{bmatrix} 2528 & 89 & \cdots & 5 & 0 \\ 69 & 558 & \cdots & 6 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 7 & 5 & \cdots & 6653 & 41 \\ 0 & 0 & \cdots & 41 & 444 \end{bmatrix} + \begin{bmatrix} 2528 & 69 & \cdots & 7 & 0 \\ 89 & 558 & \cdots & 5 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 5 & 6 & \cdots & 6653 & 41 \\ 0 & 0 & \cdots & 41 & 444 \end{bmatrix}$$

$$= \begin{bmatrix} 5056 & 158 & \cdots & 12 & 0 \\ 158 & 1116 & \cdots & 11 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 12 & 11 & \cdots & 13306 & 82 \\ 0 & 0 & \cdots & 82 & 888 \end{bmatrix}$$

$$Matriks\ Normalisasi = \begin{bmatrix} \dfrac{5056}{47901} & \dfrac{158}{47901} & \cdots & \dfrac{12}{47901} & \dfrac{0}{47901} \\ \dfrac{158}{47901} & \dfrac{1116}{47901} & \cdots & \dfrac{11}{47901} & \dfrac{0}{47901} \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ \dfrac{12}{47901} & \dfrac{11}{47901} & & \dfrac{13306}{47901} & \dfrac{82}{47901} \\ \dfrac{0}{47901} & \dfrac{0}{47901} & \cdots & \dfrac{82}{47901} & \dfrac{888}{47901} \end{bmatrix}$$

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Ekstraksi fitur

a. Kontras (*Contrast*)

$$Contrast = \sum_{i,j=0}^{levels-1} P_{i,j}(i-j)^2$$

$$= \left((1-1)^2 \times \frac{5056}{47901}\right) + \left((1-2)^2 \times \frac{158}{47901}\right) + \cdots$$

$$+ \left((8-7)^2 \times \frac{82}{47901}\right) + \left((8-8)^2 \times \frac{888}{47901}\right) = 0{,}1088$$

b. Homogenitas (*Homogenity*)

$$Homogenity = \sum_{i,j=0}^{levels-1} \frac{P_{i,j}}{1+(i-j)^2}$$

$$= \left(\frac{\dfrac{5056}{47901}}{1+(1-1)^2} + \frac{\dfrac{158}{47901}}{1+(1-2)^2} + \cdots + \frac{\dfrac{82}{47901}}{1+(8-7)^2}\right.$$

$$+ \frac{\dfrac{888}{47901}}{1+(8-8)^2} = 0{,}9472$$

c. Energi (*Energy*)

$$ASM = \sum_{i,j=0}^{levels-1} P_{i,j}^2$$

$$Energy = \sqrt{ASM}$$

$$= \left(\frac{5056}{47901}\right)^2 + \left(\frac{158}{47901}\right)^2 + \cdots + \left(\frac{82}{47901}\right)^2 + \left(\frac{888}{47901}\right)^2$$

$$= 0{,}1349$$

d. Korelasi (*Correlation*)

Sebelum mencari nilai fitur korelasi, perlu diketahui untuk terlebih dahulu

mencari nilai μ_x, μ_y, σ_x, dan σ_y, sebagai berikut:

1) Menghitung μ baris matriks *co-occurrence*:
$$\mu_x = (1 \times 5056) + (2 \times 158) + \cdots + (8 \times 0) = 0{,}0506$$

2) Menghitung μ kolom matriks *co-occurrence*:
$$\mu_y = (1 \times 5056) + (2 \times 158) + \cdots + (8 \times 0) = 0{,}0506$$

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Setelah mendapatkan nilai μ pada baris dan kolom matriks *co-occurrence*, selanjutnya adalah mencari nilai σ pada baris dan kolom matriks *co-occurrence*.

3) Mencari nilai σ_x, dari hasil perhitungan dari matriks *co-occurrence* data *chest* CT-Scan:

$$\sigma_x = \sqrt{\sum_x \sum_y (a - \mu_x)^2 P_{a,b}}$$

$$\sigma_1 = \sqrt{(1 - 0.0506)^2 \frac{5056}{47901}}$$

$$\sigma_2 = \sqrt{(2 - 0.0018)^2 \frac{158}{47901}}$$

$$\vdots$$

$$\sigma_7 = \sqrt{(7 - 1)^2 \frac{82}{47901}}$$

$$\sigma_8 = \sqrt{(8 - 0)^2 \frac{888}{47901}}$$

4) Mencari nilai σ_y, dari hasil perhitungan dari matriks co-occurrence data *chest* CT-Scan:

$$\sigma_y = \sqrt{\sum_x \sum_y (a - \mu_y)^2 P_{a,b}}$$

$$\sigma_1 = \sqrt{(1 - 0.0506)^2 \frac{5056}{47901}}$$

$$\sigma_2 = \sqrt{(2 - 0.0036)^2 \frac{158}{47901}}$$

$$\vdots$$

$$\sigma_7 = \sqrt{(7 - 7)^2 \frac{82}{47901}}$$

$$\sigma_8 = \sqrt{(8 - 0)^2 \frac{888}{47901}}$$

Sehingga didapatkan nilai fitur korelasi sebagai berikut:

$$Correlation = \sum_{i,j=0}^{levels-1} P_{i,j} \frac{(i - \mu_i)(j - \mu_j)}{\sigma_i \sigma_j} = 0{,}9819$$