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# LAMPIRAN

## Lampiran 1. Data Penelitian

BULAN	TANGGAL	BANYAK PAKET	
Agustus	1	8	
	2	7	
	3	6	
	4	8	
	5	11	
	6	3	
	7	11	
	8	6	
	9	7	
	10	10	
	11	11	
	12	7	
	13	1	
	14	12	
	15	13	
	16	8	
	17	4	
	18	5	
	19	6	
	21	7	
	22	2	
	23	6	
	24	4	
	25	4	
	26	7	
	28	5	
	29	5	
	30	4	
	31	9	
	September	1	9
		2	7
3		1	
4		8	
5		11	
6		5	
7		7	
8		7	
9		3	
11		7	
12		17	
13		6	
14		8	
15	8		
16	5		
18	8		
19	9		
20	12		

## Lanjutan Lampiran 1.

BULAN	TANGGAL	BANYAK PAKET
	21	20
	22	10
	23	6
	25	11
September	26	6
	27	6
	28	4
	29	6
	30	9
	1	1
	2	11
	3	12
	4	2
	5	6
	6	7
	7	9
	8	4
	9	19
	10	20
	11	11
	12	10
	13	9
Oktober	14	15
	16	18
	17	10
	18	11
	19	5
	20	5
	21	2
	23	9
	24	12
	25	6
	26	11
	27	6
	28	9
	30	19
	31	9
	1	11
	2	7
	3	13
	4	7
	6	5
November	7	9
	8	13
	9	16
	10	8
	11	13

**Lanjutan Lampiran 1.**

<b>BULAN</b>	<b>TANGGAL</b>	<b>BANYAK PAKET</b>
	13	3
	14	10
November	15	5
	16	10
	17	13
	18	13

Lampiran 2. Hasil uji Kolmogorov-Smirnov menggunakan SPSS.

## One-Sample Kolmogorov-Smirnov Test

		lipar
N		100
Poisson Parameter <sup>a,b</sup>	Mean	8.3700
Most Extreme Differences	Absolute	.090
	Positive	.090
	Negative	-.058
Kolmogorov-Smirnov Z		.897
Asymp. Sig. (2-tailed)		.397

a. Test distribution is Poisson.

b. Calculated from data.



**Lampiran 3. Nilai PPM fase I.**

<b>t</b>	<b>PPM</b>
1	8.000
2	7.500
3	7.000
4	7.250
5	8.000
6	7.167
7	7.714
8	7.500
9	7.444
10	7.700
11	8.000
12	7.917
13	7.385
14	7.714
15	8.067
16	8.063
17	7.824
18	7.667
19	7.579
20	7.550
21	7.286
22	7.227
23	7.087
24	6.958
⋮	⋮
75	7.973

**Lampiran 4. Nilai PPM fase II.**

<b>t</b>	<b>PPM</b>
1	2.000
2	5.500
3	7.667
4	7.250
5	8.000
6	7.667
7	7.857
8	9.250
9	9.222
10	9.400
11	9.182
12	9.500
13	9.308
14	9.000
15	9.000
16	9.250
17	9.647
18	9.556
19	9.737
20	9.400
21	9.429
22	9.227
23	9.261
24	9.417
25	9.560

**Lampiran 5.** Nilai UCL dan LCL peta kendali *Poisson Progressive Mean* fase I

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>PPM</b>	<b>Status</b>
1	100.774	7.973	-84.828	8.000	<i>In Control</i>
2	65.099	7.973	-49.152	7.500	<i>In Control</i>
3	50.9831	7.973	-35.036	7.000	<i>In Control</i>
4	43.1383	7.973	-27.192	7.250	<i>In Control</i>
5	38.053	7.973	-22.106	8.000	<i>In Control</i>
6	34.449	7.973	-18.502	7.167	<i>In Control</i>
7	31.7408	7.973	-15.794	7.714	<i>In Control</i>
8	29.6199	7.973	-13.673	7.500	<i>In Control</i>
9	27.9068	7.973	-11.960	7.444	<i>In Control</i>
10	26.4896	7.973	-10.543	7.700	<i>In Control</i>
11	25.2945	7.973	-9.348	8.000	<i>In Control</i>
12	24.271	7.973	-8.324	7.917	<i>In Control</i>
13	23.383	7.973	-7.436	7.385	<i>In Control</i>
14	22.604	7.973	-6.657	7.714	<i>In Control</i>
15	21.9142	7.973	-5.967	8.067	<i>In Control</i>
16	21.2984	7.973	-5.352	8.063	<i>In Control</i>
17	20.7447	7.973	-4.798	7.824	<i>In Control</i>
18	20.2438	7.973	-4.297	7.667	<i>In Control</i>
19	19.7881	7.973	-3.841	7.579	<i>In Control</i>
20	19.3714	7.973	-3.425	7.550	<i>In Control</i>
21	18.9887	7.973	-3.042	7.286	<i>In Control</i>
22	18.6358	7.973	-2.689	7.227	<i>In Control</i>
23	18.3091	7.973	-2.362	7.087	<i>In Control</i>
24	18.0057	7.973	-2.059	6.958	<i>In Control</i>
25	17.7231	7.973	-1.776	6.960	<i>In Control</i>
⋮	⋮	⋮	⋮	⋮	⋮
73	12.5783	7.973	3.368	8.055	<i>In Control</i>
74	12.5346	7.973	3.412	8.014	<i>In Control</i>
75	12.492	7.973	3.455	7.973	<i>In Control</i>

**Lampiran 6.** Nilai UCL dan LCL peta kendali *Poisson Progressive Mean* fase II

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>Status</b>
1	13.892	7.973	2.054	<i>In Control</i>
2	13.812	7.973	2.134	<i>In Control</i>
3	13.735	7.973	2.212	<i>In Control</i>
4	13.660	7.973	2.286	<i>In Control</i>
5	13.588	7.973	2.359	<i>In Control</i>
6	13.517	7.973	2.429	<i>In Control</i>
7	13.449	7.973	2.498	<i>In Control</i>
8	13.383	7.973	2.564	<i>In Control</i>
9	13.318	7.973	2.628	<i>In Control</i>
10	13.256	7.973	2.691	<i>In Control</i>
11	13.195	7.973	2.752	<i>In Control</i>
12	13.136	7.973	2.811	<i>In Control</i>
13	13.079	7.973	2.868	<i>In Control</i>
14	13.023	7.973	2.924	<i>In Control</i>
15	12.968	7.973	2.979	<i>In Control</i>
16	12.915	7.973	3.032	<i>In Control</i>
17	12.863	7.973	3.083	<i>In Control</i>
18	12.813	7.973	3.134	<i>In Control</i>
19	12.764	7.973	3.183	<i>In Control</i>
20	12.716	7.973	3.231	<i>In Control</i>
21	12.669	7.973	3.278	<i>In Control</i>
22	12.623	7.973	3.324	<i>In Control</i>
23	12.578	7.973	3.368	<i>In Control</i>
24	12.535	7.973	3.412	<i>In Control</i>
25	12.492	7.973	3.455	<i>In Control</i>

Lampiran 7. Nilai UCL dan LCL peta kendali C fase I.

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>Status</b>
1	16.444	7.973	-0.498	<i>In Control</i>
2	16.444	7.973	-0.498	<i>In Control</i>
3	16.444	7.973	-0.498	<i>In Control</i>
4	16.444	7.973	-0.498	<i>In Control</i>
5	16.444	7.973	-0.498	<i>In Control</i>
6	16.444	7.973	-0.498	<i>In Control</i>
7	16.444	7.973	-0.498	<i>In Control</i>
8	16.444	7.973	-0.498	<i>In Control</i>
9	16.444	7.973	-0.498	<i>In Control</i>
10	16.444	7.973	-0.498	<i>In Control</i>
11	16.444	7.973	-0.498	<i>In Control</i>
12	16.444	7.973	-0.498	<i>In Control</i>
13	16.444	7.973	-0.498	<i>In Control</i>
14	16.444	7.973	-0.498	<i>In Control</i>
15	16.444	7.973	-0.498	<i>In Control</i>
16	16.444	7.973	-0.498	<i>In Control</i>
17	16.444	7.973	-0.498	<i>In Control</i>
18	16.444	7.973	-0.498	<i>In Control</i>
19	16.444	7.973	-0.498	<i>In Control</i>
20	16.444	7.973	-0.498	<i>In Control</i>
21	16.444	7.973	-0.498	<i>In Control</i>
22	16.444	7.973	-0.498	<i>In Control</i>
23	16.444	7.973	-0.498	<i>In Control</i>
24	16.444	7.973	-0.498	<i>In Control</i>
25	16.444	7.973	-0.498	<i>In Control</i>
26	16.444	7.973	-0.498	<i>In Control</i>
27	16.444	7.973	-0.498	<i>In Control</i>
28	16.444	7.973	-0.498	<i>In Control</i>
29	16.444	7.973	-0.498	<i>In Control</i>
30	16.444	7.973	-0.498	<i>In Control</i>
31	16.444	7.973	-0.498	<i>In Control</i>
32	16.444	7.973	-0.498	<i>In Control</i>
33	16.444	7.973	-0.498	<i>In Control</i>
34	16.444	7.973	-0.498	<i>In Control</i>
35	16.444	7.973	-0.498	<i>In Control</i>
36	16.444	7.973	-0.498	<i>In Control</i>
37	16.444	7.973	-0.498	<i>In Control</i>
38	16.444	7.973	-0.498	<i>In Control</i>
39	16.444	7.973	-0.498	<i>In Control</i>
40	16.444	7.973	-0.498	<i>Out-of-control</i>
41	16.444	7.973	-0.498	<i>In Control</i>
42	16.444	7.973	-0.498	<i>In Control</i>
43	16.444	7.973	-0.498	<i>In Control</i>
44	16.444	7.973	-0.498	<i>In Control</i>
45	16.444	7.973	-0.498	<i>In Control</i>

## Lanjutan Lampiran 7.

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>Status</b>
46	16.444	7.973	-0.498	<i>In Control</i>
47	16.444	7.973	-0.498	<i>Out-of-control</i>
48	16.444	7.973	-0.498	<i>In Control</i>
49	16.444	7.973	-0.498	<i>In Control</i>
50	16.444	7.973	-0.498	<i>In Control</i>
51	16.444	7.973	-0.498	<i>In Control</i>
52	16.444	7.973	-0.498	<i>In Control</i>
53	16.444	7.973	-0.498	<i>In Control</i>
54	16.444	7.973	-0.498	<i>In Control</i>
55	16.444	7.973	-0.498	<i>In Control</i>
56	16.444	7.973	-0.498	<i>In Control</i>
57	16.444	7.973	-0.498	<i>In Control</i>
58	16.444	7.973	-0.498	<i>In Control</i>
59	16.444	7.973	-0.498	<i>In Control</i>
60	16.444	7.973	-0.498	<i>In Control</i>
61	16.444	7.973	-0.498	<i>In Control</i>
62	16.444	7.973	-0.498	<i>In Control</i>
63	16.444	7.973	-0.498	<i>In Control</i>
64	16.444	7.973	-0.498	<i>In Control</i>
65	16.444	7.973	-0.498	<i>Out-of-control</i>
66	16.444	7.973	-0.498	<i>Out-of-control</i>
67	16.444	7.973	-0.498	<i>In Control</i>
68	16.444	7.973	-0.498	<i>In Control</i>
69	16.444	7.973	-0.498	<i>In Control</i>
70	16.444	7.973	-0.498	<i>In Control</i>
71	16.444	7.973	-0.498	<i>Out-of-control</i>
72	16.444	7.973	-0.498	<i>In Control</i>
73	16.444	7.973	-0.498	<i>In Control</i>
74	16.444	7.973	-0.498	<i>In Control</i>
75	16.444	7.973	-0.498	<i>In Control</i>

**Lampiran 8.** Nilai UCL dan LCL peta kendali C untuk fase II (perbaikan).

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>Status</b>
1	15.250	7.200	-0.850	<i>In Control</i>
2	15.250	7.200	-0.850	<i>In Control</i>
3	15.250	7.200	-0.850	<i>In Control</i>
4	15.250	7.200	-0.850	<i>In Control</i>
5	15.250	7.200	-0.850	<i>In Control</i>
6	15.250	7.200	-0.850	<i>In Control</i>
7	15.250	7.200	-0.850	<i>In Control</i>
8	15.250	7.200	-0.850	<i>In Control</i>
9	15.250	7.200	-0.850	<i>In Control</i>
10	15.250	7.200	-0.850	<i>In Control</i>
11	15.250	7.200	-0.850	<i>In Control</i>
12	15.250	7.200	-0.850	<i>In Control</i>
13	15.250	7.200	-0.850	<i>In Control</i>
14	15.250	7.200	-0.850	<i>In Control</i>
15	15.250	7.200	-0.850	<i>In Control</i>
16	15.250	7.200	-0.850	<i>In Control</i>
17	15.250	7.200	-0.850	<i>In Control</i>
18	15.250	7.200	-0.850	<i>In Control</i>
19	15.250	7.200	-0.850	<i>In Control</i>
20	15.250	7.200	-0.850	<i>In Control</i>
21	15.250	7.200	-0.850	<i>In Control</i>
22	15.250	7.200	-0.850	<i>In Control</i>
23	15.250	7.200	-0.850	<i>In Control</i>
24	15.250	7.200	-0.850	<i>In Control</i>
⋮	⋮	⋮	⋮	⋮
68	15.250	7.200	-0.850	<i>In Control</i>
69	15.250	7.200	-0.850	<i>In Control</i>
70	15.250	7.200	-0.850	<i>In Control</i>

**Lampiran 9.** Nilai UCL dan LCL peta kendali C fase II.

<b>t</b>	<b>UCL</b>	<b>CL</b>	<b>LCL</b>	<b>STATUS</b>
1	15.250	7.167	-0.850	<i>In Control</i>
2	15.250	7.167	-0.850	<i>In Control</i>
3	15.250	7.167	-0.850	<i>In Control</i>
4	15.250	7.167	-0.850	<i>In Control</i>
5	15.250	7.167	-0.850	<i>In Control</i>
6	15.250	7.167	-0.850	<i>In Control</i>
7	15.250	7.167	-0.850	<i>In Control</i>
8	15.250	7.167	-0.850	<i>Out-of-Control</i>
9	15.250	7.167	-0.850	<i>In Control</i>
10	15.250	7.167	-0.850	<i>In Control</i>
11	15.250	7.167	-0.850	<i>In Control</i>
12	15.250	7.167	-0.850	<i>In Control</i>
13	15.250	7.167	-0.850	<i>In Control</i>
14	15.250	7.167	-0.850	<i>In Control</i>
15	15.250	7.167	-0.850	<i>In Control</i>
16	15.250	7.167	-0.850	<i>In Control</i>
17	15.250	7.167	-0.850	<i>Out-of-Control</i>
18	15.250	7.167	-0.850	<i>In Control</i>
19	15.250	7.167	-0.850	<i>In Control</i>
20	15.250	7.167	-0.850	<i>In Control</i>
21	15.250	7.167	-0.850	<i>In Control</i>
22	15.250	7.167	-0.850	<i>In Control</i>
23	15.250	7.167	-0.850	<i>In Control</i>
24	15.250	7.167	-0.850	<i>In Control</i>
25	15.250	7.167	-0.850	<i>In Control</i>



**Lampiran 10.** ARL peta kendali *Poisson Progressive Mean*

```

m <- 20.000
mu0 <- 1
L <- 3.02
run_lengths <- numeric(m) #Menginisialisasi run_lengths dengan
panjang m
for (i in 1:m) {
  n <- 100.000
  X <- rpois(n, mu0) #Bangkitkan data
  ppmt <- numeric(m) #Inisialisasi ppmt dengan panjang ns
  for (t in 1:m) {
    ppmt[t] <- mean(X[1:t]) / t #Rumus ppm
    UCLt <- mu0 + L * (1 / t^0.2) * sqrt(mu0 / t)
    LCLt <- mu0 - L * (1 / t^0.2) * sqrt(mu0 / t)
    in_control <- ppmt[t] >= LCLt & ppmt[t] <= UCLt
    if (!in_control) {
      run_lengths[i] <- t - 1
      break
    }
  }
}
arl <- mean(run_lengths)

cat("Mean run length:", arl, "\n")

```

**Lampiran 11. Riwayat Hidup Penulis****A. DATA PRIBADI**

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**B. RIWAYAT PENDIDIKAN**

1. SD Mentari Indonesia (2008-2011)
2. SDN Mangkura IV Makassar (2011-2014)
3. SMPN 6 Makassar (2014-2017)
4. SMAN 2 Makassar (2017-2020)
5. S1 Program Studi Statistik FMIPA Unhas (2020-2024)