

Nama : Misi Alun Samudra

NPM : 22081010035

ITERASI 1

no	X1 (1-5)	X2 (3-7)	X3 (7-9)	X4 (2-8)	X5 (6-10)
1	2	3	8	5	9
2	4	7	8	2	4
3	4	7	8	7	5
4	4	5	8	3	8
5	2	7	7	8	6
6	2	3	8	5	4
7	5	5	8	7	4
8	1	6	8	2	9
9	1	5	7	2	10
10	2	4	7	8	7
11	4	5	7	4	8
12	4	6	9	6	6
13	5	3	9	4	10
14	1	5	9	2	10
15	2	3	8	5	7
16	3	3	7	6	9
17	1	6	8	3	7
18	3	4	7	3	5
19	5	3	7	5	8
20	4	7	8	2	6
21	3	7	8	4	9
22	3	4	7	2	6
23	4	6	7	7	10
24	1	7	7	3	8
25	4	6	9	6	9
26	1	6	8	5	5
27	4	6	7	6	8
28	3	3	8	7	8
29	4	5	9	8	8
30	3	6	8	2	9
31	1	5	7	8	5
32	3	5	9	7	7
33	3	5	9	3	7
34	5	7	9	5	8
35	1	4	8	6	5
36	5	6	7	7	4
37	5	7	9	4	10
38	5	7	9	5	6
39	5	4	9	8	4

C1				
3	3	7	6	9

40	4	4	8	3	10
41	3	7	9	7	6
42	3	3	7	2	9
43	5	7	7	3	6
44	2	5	8	6	8
45	5	7	8	7	6
46	1	4	8	3	4
47	3	5	7	6	7
48	3	3	7	4	6
49	5	6	8	6	6
50	4	3	8	4	9

ITERASI 2

no	X1 (1-5)	X2 (3-7)	X3 (7-9)	X4 (2-8)	X5 (6-10)
1	2	3	8	5	9
2	4	7	8	2	4
3	4	7	8	7	5
4	4	5	8	3	8
5	2	7	7	8	6
6	2	3	8	5	4
7	5	5	8	7	4
8	1	6	8	2	9
9	1	5	7	2	10
10	2	4	7	8	7
11	4	5	7	4	8
12	4	6	9	6	6
13	5	3	9	4	10
14	1	5	9	2	10
15	2	3	8	5	7
16	3	3	7	6	9
17	1	6	8	3	7
18	3	4	7	3	5
19	5	3	7	5	8
20	4	7	8	2	6
21	3	7	8	4	9
22	3	4	7	2	6
23	4	6	7	7	10
24	1	7	7	3	8
25	4	6	9	6	9
26	1	6	8	5	5
27	4	6	7	6	8
28	3	3	8	7	8
29	4	5	9	8	8
30	3	6	8	2	9

C1				
3.2	4.2	7.8	4.95	8.5

31	1	5	7	8	5
32	3	5	9	7	7
33	3	5	9	3	7
34	5	7	9	5	8
35	1	4	8	6	5
36	5	6	7	7	4
37	5	7	9	4	10
38	5	7	9	5	6
39	5	4	9	8	4
40	4	4	8	3	10
41	3	7	9	7	6
42	3	3	7	2	9
43	5	7	7	3	6
44	2	5	8	6	8
45	5	7	8	7	6
46	1	4	8	3	4
47	3	5	7	6	7
48	3	3	7	4	6
49	5	6	8	6	6
50	4	3	8	4	9

ITERASI 3

no	X1 (1-5)	X2 (3-7)	X3 (7-9)	X4 (2-8)	X5 (6-10)
1	2	3	8	5	9
2	4	7	8	2	4
3	4	7	8	7	5
4	4	5	8	3	8
5	2	7	7	8	6
6	2	3	8	5	4
7	5	5	8	7	4
8	1	6	8	2	9
9	1	5	7	2	10
10	2	4	7	8	7
11	4	5	7	4	8
12	4	6	9	6	6
13	5	3	9	4	10
14	1	5	9	2	10
15	2	3	8	5	7
16	3	3	7	6	9
17	1	6	8	3	7
18	3	4	7	3	5
19	5	3	7	5	8
20	4	7	8	2	6

C1				
3.21	4.16	7.737	4.84	8.58

21	3	7	8	4	9
22	3	4	7	2	6
23	4	6	7	7	10
24	1	7	7	3	8
25	4	6	9	6	9
26	1	6	8	5	5
27	4	6	7	6	8
28	3	3	8	7	8
29	4	5	9	8	8
30	3	6	8	2	9
31	1	5	7	8	5
32	3	5	9	7	7
33	3	5	9	3	7
34	5	7	9	5	8
35	1	4	8	6	5
36	5	6	7	7	4
37	5	7	9	4	10
38	5	7	9	5	6
39	5	4	9	8	4
40	4	4	8	3	10
41	3	7	9	7	6
42	3	3	7	2	9
43	5	7	7	3	6
44	2	5	8	6	8
45	5	7	8	7	6
46	1	4	8	3	4
47	3	5	7	6	7
48	3	3	7	4	6
49	5	6	8	6	6
50	4	3	8	4	9

ITERASI 4

no	X1 (1-5)	X2 (3-7)	X3 (7-9)	X4 (2-8)	X5 (6-10)
1	2	3	8	5	9
2	4	7	8	2	4
3	4	7	8	7	5
4	4	5	8	3	8
5	2	7	7	8	6
6	2	3	8	5	4
7	5	5	8	7	4
8	1	6	8	2	9
9	1	5	7	2	10
10	2	4	7	8	7
11	4	5	7	4	8

C1				
3.31	4	7.625	4.75	8.63

12	4	6	9	6	6
13	5	3	9	4	10
14	1	5	9	2	10
15	2	3	8	5	7
16	3	3	7	6	9
17	1	6	8	3	7
18	3	4	7	3	5
19	5	3	7	5	8
20	4	7	8	2	6
21	3	7	8	4	9
22	3	4	7	2	6
23	4	6	7	7	10
24	1	7	7	3	8
25	4	6	9	6	9
26	1	6	8	5	5
27	4	6	7	6	8
28	3	3	8	7	8
29	4	5	9	8	8
30	3	6	8	2	9
31	1	5	7	8	5
32	3	5	9	7	7
33	3	5	9	3	7
34	5	7	9	5	8
35	1	4	8	6	5
36	5	6	7	7	4
37	5	7	9	4	10
38	5	7	9	5	6
39	5	4	9	8	4
40	4	4	8	3	10
41	3	7	9	7	6
42	3	3	7	2	9
43	5	7	7	3	6
44	2	5	8	6	8
45	5	7	8	7	6
46	1	4	8	3	4
47	3	5	7	6	7
48	3	3	7	4	6
49	5	6	8	6	6
50	4	3	8	4	9

ITERASI 5

no	X1 (1-5)	X2 (3-7)	X3 (7-9)	X4 (2-8)	X5 (6-10)
1	2	3	8	5	9
2	4	7	8	2	4

C1				
3.47	3.93	7.667	4.93	8.53

3	4	7	8	7	5
4	4	5	8	3	8
5	2	7	7	8	6
6	2	3	8	5	4
7	5	5	8	7	4
8	1	6	8	2	9
9	1	5	7	2	10
10	2	4	7	8	7
11	4	5	7	4	8
12	4	6	9	6	6
13	5	3	9	4	10
14	1	5	9	2	10
15	2	3	8	5	7
16	3	3	7	6	9
17	1	6	8	3	7
18	3	4	7	3	5
19	5	3	7	5	8
20	4	7	8	2	6
21	3	7	8	4	9
22	3	4	7	2	6
23	4	6	7	7	10
24	1	7	7	3	8
25	4	6	9	6	9
26	1	6	8	5	5
27	4	6	7	6	8
28	3	3	8	7	8
29	4	5	9	8	8
30	3	6	8	2	9
31	1	5	7	8	5
32	3	5	9	7	7
33	3	5	9	3	7
34	5	7	9	5	8
35	1	4	8	6	5
36	5	6	7	7	4
37	5	7	9	4	10
38	5	7	9	5	6
39	5	4	9	8	4
40	4	4	8	3	10
41	3	7	9	7	6
42	3	3	7	2	9
43	5	7	7	3	6
44	2	5	8	6	8
45	5	7	8	7	6
46	1	4	8	3	4
47	3	5	7	6	7
48	3	3	7	4	6
49	5	6	8	6	6

50	4	3	8	4	9
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Centroid Awal

C2					C3				
1	5	7	8	5	5	7	7	3	6

Jarak Eu

C1	C2
1.732051	5.567764
7.681146	7.141428
5.91608	3.872983
4	6.63325
5.477226	2.44949
5.291503	4
5.91608	4.358899
5.477226	7.348469
5	7.81025
3.162278	2.44949
3.162278	5.830952
4.795832	4.358899
3.605551	8.062258
5.385165	8.062258
2.645751	4.358899
0	5.291503
5.196152	5.567764
5.09902	5.477226
2.44949	6.164414
6.557439	7.141428
4.582576	6.403124
5.09902	6.480741
3.464102	6
5.477226	6.164414
3.741657	5.830952
5.567764	3.316625
3.316625	4.795832
1.732051	4.358899
3.741657	4.690416
5.09902	7.615773
5.291503	0
3.605551	3.605551
4.582576	6.082763
5.09902	6.480741
4.690416	2.44949
6.244998	4.358899
5.385165	8.062258
5.830952	5.830952
6.164414	4.690416

3.605551	7.81025
5.477226	3.741657
4	7.745967
6.164414	6.78233
2.645751	3.872983
5.567764	4.795832
6.324555	5.291503
2.828427	3.464102
3.605551	5
4.795832	4.795832
2.44949	6.78233

Centroid Iterasi 2

C2					C3				
2.6667	5.167	7.83	6.583	4.9167	3.556	6.167	8.056	3.611	7

Jarak Eu

C1	C2
1.781151	4.93429
6.121479	5.197489
4.997249	2.312406
2.317865	4.917373
5.047029	2.771382
4.813782	2.917857
5.326584	2.552232
4.131888	6.417208
4.131888	7.095578
3.697634	2.974428
1.752855	4.322101
3.559846	2.312406
3.045078	6.634296
4.227588	7.142401
2.274313	3.466106
1.863465	4.74488
3.764638	4.547588
4.095424	3.874776
2.360614	4.779877
4.844843	5.229457
3.012059	5.181431
3.958851	4.93429
3.312476	5.401903
4.168033	5.401903
2.583118	4.565876
4.513591	2.452323
2.423324	3.607477
2.44387	3.80971
3.503213	3.831521
3.503213	6.205956

5.260466	2.348167
2.927883	2.452323
2.858758	4.322101
3.573863	4.709624
4.274634	2.124591
5.618941	2.801289
3.958851	6.533036
4.332724	3.721186
5.854272	3.318718
2.602403	6.468943
4.446628	2.486072
3.327537	6.571191
4.666101	4.849112
1.863465	3.21671
4.644621	3.190698
5.382611	4.224597
2.161597	2.348167
3.045078	3.653385
3.724581	2.771382
1.809005	5.463261

Centroid Iterasi 3

C2					C3				
3.0625	5.375	8	6.563	5.25	3.333	6.133	8	3.067	7.2

Jarak Eu

C1	C2
1.754298	4.824255
6.149342	5.089051
5.122056	1.942534
2.264993	4.612314
5.168089	2.720007
4.88539	3.282292
5.440945	2.376644
4.074786	6.286767
4.029325	6.983798
3.807705	3.024638
1.708703	4.018512
3.688344	1.774384
2.977757	6.286767
4.157895	6.983798
2.322359	3.503347
1.856336	4.585132
3.77299	4.516463
4.100537	3.955811
2.333663	4.516463
4.847537	4.989833

3.012899	4.824255
3.916723	4.926808
3.351933	5.002343
4.151561	5.30551
2.670242	4.08025
4.60248	2.673656
2.49709	3.185661
2.538894	3.660388
3.638057	3.412981
3.429544	5.939145
5.377701	2.742889
3.081982	2.097245
2.869749	4.110771
3.638057	4.171143
4.373808	2.554102
5.72379	2.626488
3.950174	6.043462
4.421679	3.224661
5.980115	3.20522
2.475923	6.166315
4.585295	2.097245
3.191054	6.443868
4.67622	4.544055
1.979815	3.024638
4.759885	2.673656
5.416708	4.516463
2.264993	2.126837
3.047637	3.711258
3.828382	2.241303
1.708703	5.210416

Centroid Iterasi 4

C2					C3				
3.2353	5.412	8	6.824	5.5882	3.059	5.941	8.059	3	7.18

Jarak Eu

C1	C2
1.751116	4.72313
6.210186	5.375518
5.274126	1.866663
2.250868	4.603294
5.344755	2.569451
4.931167	3.631847
5.517373	2.416065
4.146252	6.344221
4.023855	6.992581
3.913618	2.810017
1.678215	3.942493

3.849209	1.666897
2.862063	6.112837
4.206115	6.992581
2.359323	3.558216
1.786451	4.380675
3.897615	4.685618
4.085512	4.244272
2.165965	4.367226
4.905752	5.152014
3.153	4.710659
3.865412	5.146302
3.4375	4.62878
4.265138	5.380987
2.840142	3.774803
4.76355	3.002306
2.610825	2.902689
2.586775	3.423408
3.783703	2.992493
3.455634	5.94205
5.517373	2.810017
3.269772	1.802536
2.948119	4.223431
3.767148	3.972222
4.493485	2.830873
5.80443	2.648366
4.023855	5.837179
4.548781	3.183
6.057343	3.164465
2.359323	6.054824
4.789719	1.943848
3.031733	6.463633
4.710776	4.62878
2.194631	2.861872
4.892996	2.416065
5.471874	4.912381
2.385667	1.973878
2.990218	3.87477
3.929555	2.075562
1.521974	5.100377

Centroid Iterasi 5

Jarak Eu

C2					C3				
3.3333	5.5	8.06	6.722	5.6111	2.824	5.824	7.941	2.824	7.41

C1	C2
1.831818	4.741464
6.241439	5.252865

5.153208	1.774302
2.357023	4.501029
5.274677	2.631715
4.867123	3.686813
5.33125	2.388243
4.391912	6.283429
4.292112	6.954881
3.788873	2.950204
1.738454	3.863409
3.72678	1.503083
2.832353	6.049181
4.444722	6.938887
2.342838	3.595264
1.699673	4.413783
4.068852	4.634812
4.109609	4.207577
1.988858	4.337605
4.982191	5.014793
3.289715	4.610776
3.96092	5.091751
3.379678	4.598712
4.467164	5.326384
2.772885	3.686813
4.791196	3.006167
2.53421	2.834967
2.399074	3.485419
3.59011	2.987629
3.663635	5.843642
5.436502	2.968975
3.123388	1.805342
3.036811	4.127595
3.717825	3.820025
4.452215	2.931312
5.647025	2.61052
4.068852	5.708992
4.467164	3.006167
5.838569	3.185616
2.507766	5.984548
4.699882	1.865873
3.218005	6.423337
4.728166	4.488669
2.195956	2.873893
4.749269	2.293307
5.521674	4.914077
2.299758	1.981395
2.970223	3.877762
3.780065	1.924501

1.534782	5.058912
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C3	Kelas
6.244998	1
2.645751	3
4.358899	2
3.162278	3
5.830952	2
5.830952	2
5	2
5.291503	3
6.082763	1
6.63325	2
3.162278	1
3.872983	3
6.082763	1
6.403124	1
5.567764	1
6.164414	1
4.358899	3
3.741657	3
4.898979	1
1.732051	3
3.872983	3
3.741657	3
5.830952	1
4.472136	3
4.898979	1
4.795832	2
3.872983	1
6.403124	1
6.164414	1
4	3
6.78233	2
5.385165	1
3.605551	3
3.464102	3
6	2
4.582576	2
4.582576	3
2.828427	3
6.480741	2

C1					C2				
2	3	8	5	9					
					4	7	8	7	5
					2	7	7	8	6
					2	3	8	5	4
					5	5	8	7	4
1	5	7	2	10					
					2	4	7	8	7
4	5	7	4	8					
5	3	9	4	10					
1	5	9	2	10					
2	3	8	5	7					
3	3	7	6	9					
5	3	7	5	8					
4	6	7	7	10					
4	6	9	6	9					
					1	6	8	5	5
4	6	7	6	8					
3	3	8	7	8					
4	5	9	8	8					
					1	5	7	8	5
3	5	9	7	7					
					1	4	8	6	5
					5	6	7	7	4
					5	4	9	8	4

	4	4	8	3	10					
						3	7	9	7	6
	3	3	7	2	9					
	2	5	8	6	8					
						1	4	8	3	4
	3	5	7	6	7					
	3	3	7	4	6					
	4	3	8	4	9					
Rata-Rata	3.2	4.2	7.8	4.95	8.5	2.667	5.167	7.833	6.583	4.917

C3	Kelas
4.287147	1
3.534224	3
4.047176	2
1.713238	3
4.948812	2
4.835249	2
4.89236	2
3.627314	3
4.538926	1
5.243161	2
1.955524	1
2.797155	2
4.707166	1
4.51438	1
3.792048	1
4.599718	1
2.633474	3
3.238941	3
4.019628	1
2.119137	3
2.270993	3
3.116563	3
4.671624	1
3.116563	3
3.289996	1
3.534224	2
2.836599	1
4.777455	1
4.765812	1
2.633474	3

[illegible]

						1	5	7	8	5
						3	5	9	7	7
						1	4	8	6	5
						5	6	7	7	4
						5	4	9	8	4
	4	4	8	3	10					
						3	7	9	7	6
	3	3	7	2	9					
	2	5	8	6	8					
						5	7	8	7	6
						1	4	8	3	4
	3	5	7	6	7					
	3	3	7	4	6					
						5	6	8	6	6
	4	3	8	4	9					
Rata-Rata	3.2105	4.1579	7.737	4.842	8.579	3.063	5.375	8	6.563	5.25

C3	Kelas
4.309679	1
3.54589	3
4.637528	2
1.540563	3
5.413563	2
5.057008	2
5.456495	2
3.136877	3
4.087379	1
5.630867	2
2.059126	1
3.392148	2
4.722993	1
4.087379	3
3.920884	1
4.772141	1
2.346629	3
3.241399	3
4.239497	1
1.942507	3

[illegible]

2.230097	3
2.87054	3
4.977282	1
2.8	3
3.64783	1
3.746999	2
3.272104	1
5.10294	1
5.263712	2
2.122891	3
6.075086	2
4.231627	2
1.56205	3
2.984404	3
4.841487	2
5.432004	2
3.638681	3
3.115552	3
6.550318	2
3.583295	1
4.33282	2
3.912374	1
2.44404	3
3.508086	1
4.521062	2
4.498889	3
3.32265	2
3.638681	1
3.583295	2
3.791218	1

Rata-Rata	3.3125	4	7.625	4.75	8.625	3.235	5.412	8	6.824	5.588
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4	6	7	7	10						
4	6	9	6	9						
					1	6	8	5	5	
4	6	7	6	8						
3	3	8	7	8						
					4	5	9	8	8	
					1	5	7	8	5	
					3	5	9	7	7	
					1	4	8	6	5	
					5	6	7	7	4	
					5	4	9	8	4	
4	4	8	3	10						
					3	7	9	7	6	
3	3	7	2	9						
2	5	8	6	8						
					5	7	8	7	6	
					3	5	7	6	7	
3	3	7	4	6						
					5	6	8	6	6	
4	3	8	4	9						

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C3	Kelas
4.135256	1
3.61944	3
4.769424	2
1.566297	3
5.454118	2
4.885187	2
5.545034	2
2.927616	3
3.901025	3
5.571492	2
2.137974	1

C1					C2				
2	3	8	5	9					
					4	7	8	7	5
					2	7	7	8	6
					2	3	8	5	4
					5	5	8	7	4
					2	4	7	8	7
4	5	7	4	8					

5.102072	2
1.56298	3
5.633562	2
5.003113	2
5.873817	2
2.561358	3
3.502347	3
5.643994	2
2.162915	1
3.823529	2
4.681185	1
3.535779	3
3.682466	1
4.636996	1
1.886943	3
3.176471	3
4.321828	1
2.333004	3
2.307652	3
2.629353	3
5.142267	1
2.443833	3
3.892145	1
3.73008	2
3.568897	1
5.078961	1
5.506838	2
1.807328	3
6.123866	2
4.409411	2
1.425181	3
3.510735	3
4.749795	2
5.893812	2
3.914749	3
3.737956	2
6.900679	2
3.382737	1
4.687464	2
3.477063	1
3.005186	3
3.434508	1
5.055745	2
4.280801	3
3.443061	2
3.502347	1
4.105444	2

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					2	3	8	5	4
					5	5	8	7	4
					2	4	7	8	7
4	5	7	4	8					
					4	6	9	6	6
5	3	9	4	10					
2	3	8	5	7					
3	3	7	6	9					
5	3	7	5	8					
4	6	7	7	10					
4	6	9	6	9					
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4	6	7	6	8					
3	3	8	7	8					
					4	5	9	8	8
					1	5	7	8	5
					3	5	9	7	7
					1	4	8	6	5
					5	6	7	7	4
					5	7	9	5	6
					5	4	9	8	4
4	4	8	3	10					
					3	7	9	7	6
3	3	7	2	9					
2	5	8	6	8					
					5	7	8	7	6
					3	5	7	6	7
3	3	7	4	6					
					5	6	8	6	6

3.642312	1		4	3	8	4	9					
		Rata-Rata	3.4667	3.9333	7.667	4.933	8.533	3.333	5.5	8.056	6.722	5.611

C3				
4	7	8	2	4
4	5	8	3	8
1	6	8	2	9
4	6	9	6	6
1	6	8	3	7
3	4	7	3	5
4	7	8	2	6
3	7	8	4	9
3	4	7	2	6
1	7	7	3	8
3	6	8	2	9
3	5	9	3	7
5	7	9	5	8
5	7	9	4	10
5	7	9	5	6

[illegible]

5	7	7	3	6
5	7	8	7	6
5	6	8	6	6
3.556	6.17	8.056	3.611	7

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	1	0	0
0	1	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

C3				
4	7	8	2	4
4	5	8	3	8
1	6	8	2	9
1	6	8	3	7
3	4	7	3	5
4	7	8	2	6
3	7	8	4	9
3	4	7	2	6
1	7	7	3	8
3	6	8	2	9

3	5	9	3	7
5	7	9	5	8
5	7	9	4	10
5	7	9	5	6
5	7	7	3	6
3.333	6.13	8	3.067	7.2

C3				
4	7	8	2	4
4	5	8	3	8
1	6	8	2	9
1	5	9	2	10
1	6	8	3	7
3	4	7	3	5
4	7	8	2	6

3	7	8	4	9
3	4	7	2	6
1	7	7	3	8
3	6	8	2	9
3	5	9	3	7
5	7	9	5	8
5	7	9	4	10
5	7	9	5	6
5	7	7	3	6
1	4	8	3	4
3.059	5.94	8.059	3	7.176

C3				
4	7	8	2	4
4	5	8	3	8
1	6	8	2	9
1	5	7	2	10

1	5	9	2	10
1	6	8	3	7
3	4	7	3	5
4	7	8	2	6
3	7	8	4	9
3	4	7	2	6
1	7	7	3	8
3	6	8	2	9
3	5	9	3	7
5	7	9	5	8
5	7	9	4	10
5	7	7	3	6
1	4	8	3	4
2.824	5.82	7.941	2.824	7.412

C3				
4	7	8	2	4

4	5	8	3	8
1	6	8	2	9
1	5	7	2	10
1	5	9	2	10
1	6	8	3	7
3	4	7	3	5
4	7	8	2	6
3	7	8	4	9
3	4	7	2	6
1	7	7	3	8
3	6	8	2	9
3	5	9	3	7
5	7	9	5	8
5	7	9	4	10
5	7	7	3	6
1	4	8	3	4

2.824	5.82	7.941	2.824	7.412