

## LAMPIRAN

### 1. Data Penelitian

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
1	3	3	3	2	2	4	4	3	2	2	5	3	3	13	8	18
2	4	4	4	5	4	3	4	3	2	2	2	2	3	21	7	14
3	3	3	4	4	4	3	3	3	3	3	3	4	3	18	6	19
4	3	3	3	4	4	4	4	3	4	4	4	4	3	17	8	22
5	3	3	3	4	4	4	4	3	3	3	3	3	3	17	8	18
6	2	3	3	3	3	4	4	2	3	3	3	4	3	14	8	18
7	4	4	3	3	4	3	4	3	2	3	2	3	3	18	7	16
8	4	2	2	4	4	5	5	4	4	3	3	3	4	16	10	21
9	4	4	4	4	4	4	4	4	4	3	3	2	4	20	8	20
10	4	3	4	4	4	4	4	3	4	2	4	3	3	19	8	19
11	4	3	4	3	4	4	4	4	4	3	4	3	5	18	8	23
12	3	3	4	3	3	4	4	3	3	3	3	3	4	16	8	19
13	4	4	4	4	4	4	4	5	5	3	3	3	3	20	8	22
14	4	3	4	4	4	4	4	4	4	4	4	2	4	19	8	22
15	4	4	5	4	4	3	3	4	4	3	5	4	5	21	6	25
16	3	3	2	2	2	4	4	3	3	3	3	4	3	12	8	19
17	3	3	2	3	3	3	3	3	3	4	4	3	3	14	6	20

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
18	3	2	2	2	4	3	3	3	4	3	3	3	3	13	6	19
19	3	2	2	3	3	3	3	2	3	3	4	3	3	13	6	18
20	3	3	3	3	3	4	4	4	3	4	4	4	3	15	8	22
21	4	3	3	3	4	4	4	4	5	5	4	5	4	17	8	27
22	3	4	4	4	4	4	3	3	3	4	4	4	3	19	7	21
23	4	3	3	3	5	5	4	5	4	5	5	4	5	18	9	28
24	4	4	4	4	3	4	3	3	4	4	4	4	4	19	7	23
25	3	3	3	1	3	4	3	3	3	3	4	3	3	13	7	19
26	4	4	3	3	3	3	4	3	4	3	4	4	3	17	7	21
27	4	4	4	4	4	3	3	3	4	4	4	4	3	20	6	22
28	4	4	4	4	4	4	3	4	3	4	3	4	4	20	7	22
29	4	3	4	4	4	3	4	3	4	3	3	4	4	19	7	21
30	3	4	4	4	3	4	3	3	3	3	3	3	3	18	7	18
31	5	4	4	4	4	4	4	4	4	4	5	5	4	21	8	26
32	4	4	4	4	4	5	5	5	4	5	4	5	5	20	10	28
33	4	4	4	4	4	3	4	3	4	4	4	3	4	20	7	22
34	4	4	4	3	3	4	3	4	3	4	3	3	3	18	7	20
35	5	5	5	4	5	4	4	4	4	4	5	5	4	24	8	26
36	5	4	5	5	4	5	4	5	5	5	4	5	5	23	9	29
37	4	4	4	3	3	4	4	4	4	4	3	4	3	18	8	22

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
38	4	4	5	4	4	4	4	5	5	5	5	4	5	21	8	29
39	3	3	3	3	4	3	4	3	3	4	3	4	4	16	7	21
40	4	4	4	4	4	4	4	3	3	3	3	3	4	20	8	19
41	3	3	3	3	3	3	4	3	3	3	3	3	3	15	7	18
42	4	3	3	3	3	3	3	4	3	3	3	3	3	16	6	19
43	3	4	3	4	3	4	3	4	4	3	3	3	4	17	7	21
44	3	3	4	4	4	3	4	3	4	3	4	4	4	18	7	22
45	4	3	3	4	4	3	3	4	4	4	3	4	3	18	6	22
46	3	4	3	3	4	3	3	3	4	3	4	4	3	17	6	21
47	4	4	5	5	5	5	5	5	5	4	5	4	5	23	10	28
48	3	3	4	4	3	4	4	4	4	3	4	3	3	17	8	21
49	4	4	5	4	5	5	4	4	5	5	4	5	5	22	9	28
50	4	4	3	4	4	3	3	3	4	4	4	4	3	19	6	22
51	4	3	4	3	3	3	3	3	4	4	4	3	4	17	6	22
52	4	3	4	3	4	4	3	3	3	3	4	4	3	18	7	20
53	3	2	3	2	3	2	2	2	2	3	2	2	2	13	4	13
54	4	3	4	4	4	3	3	3	4	3	4	4	4	19	6	22
55	4	5	4	5	5	4	5	5	4	5	4	5	5	23	9	28
56	4	5	4	5	5	5	4	4	5	5	4	4	5	23	9	27
57	4	5	5	5	4	4	4	5	5	5	5	4	5	23	8	29

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
58	5	4	4	5	5	5	5	4	5	4	4	5	5	23	10	27
59	3	4	3	4	4	4	4	3	4	4	4	4	3	18	8	22
60	3	4	3	3	4	4	4	4	4	4	3	3	4	17	8	22
61	4	4	3	3	4	3	3	3	4	4	4	3	4	18	6	22
62	3	4	4	3	4	3	4	4	3	3	4	3	4	18	7	21
63	3	4	4	3	3	4	4	3	4	4	4	3	4	17	8	22
64	3	3	4	4	3	4	3	3	4	4	3	4	4	17	7	22
65	4	3	4	3	4	4	4	4	4	4	4	4	3	18	8	23
66	3	3	4	1	4	4	4	4	4	3	3	3	4	15	8	21
67	4	4	3	4	3	4	3	4	4	3	3	4	4	18	7	22
68	3	4	4	1	3	4	3	3	4	3	3	4	4	15	7	21
69	4	3	3	4	4	4	3	4	4	3	3	3	4	18	7	21
70	4	4	3	1	4	4	4	3	3	4	4	4	4	16	8	22
71	4	4	4	5	4	5	5	5	5	4	4	5	5	21	10	28
72	3	3	3	3	4	4	3	3	4	3	3	3	3	16	7	19
73	4	1	1	4	4	4	4	5	4	5	4	4	4	14	8	26
74	4	4	4	3	3	4	4	3	3	4	3	3	4	18	8	20
75	5	1	1	5	4	5	5	4	5	4	4	5	5	16	10	27
76	2	2	2	2	2	2	2	2	2	3	2	2	2	10	4	13
77	4	5	4	4	5	4	5	4	4	4	5	5	5	22	9	27

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
78	3	3	4	4	4	4	4	3	4	3	4	4	3	18	8	21
79	5	4	4	5	4	5	5	4	4	5	5	4	5	22	10	27
80	4	4	4	4	4	4	4	3	4	4	3	3	4	20	8	21
81	3	2	2	2	3	3	2	3	3	2	2	2	2	12	5	14
82	4	4	4	3	3	4	4	4	3	3	4	4	3	18	8	21
83	5	5	5	5	5	5	5	5	5	5	5	5	5	25	10	30
84	3	4	4	4	4	4	3	3	4	3	3	4	3	19	7	20
85	4	5	4	5	5	4	4	4	4	4	4	4	4	23	8	24
86	3	3	3	4	4	4	3	4	4	3	3	4	4	17	7	22
87	5	5	5	5	5	4	5	4	5	5	5	4	4	25	9	27
88	2	2	2	3	3	2	2	2	3	3	2	3	3	12	4	16
89	3	3	3	4	4	4	3	3	3	3	4	3	3	17	7	19
90	3	3	2	3	2	2	4	3	3	3	3	2	2	13	6	16
91	3	3	3	3	3	3	3	3	3	3	3	3	3	15	6	18
92	2	4	4	3	3	4	4	3	2	3	3	2	3	16	8	16
93	4	3	3	3	3	4	4	4	4	4	4	4	4	16	8	24
94	3	3	4	3	4	4	3	3	3	4	4	4	4	17	7	22
95	4	5	4	5	4	4	4	5	4	4	5	4	4	22	8	26
96	4	5	4	5	4	4	5	5	5	4	4	4	4	22	9	26
97	4	5	5	4	4	5	5	5	4	5	5	5	5	22	10	29

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
98	5	4	4	4	4	4	5	5	5	5	5	4	4	21	9	28
99	5	4	5	5	4	4	5	4	4	4	4	4	5	23	9	25
100	5	5	5	4	4	4	4	5	4	4	5	5	4	23	8	27

## 2. Data Transformasi (MSI)

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
1	2.32	2.79	2.74	1.67	1.00	3.37	3.43	2.41	1.00	1.00	4.51	2.13	2.35	10.510	6.795	13.39
2	3.56	3.89	3.81	4.68	3.45	2.11	3.43	2.41	1.00	1.00	1.00	1.00	2.35	19.38	5.54	8.758
3	2.32	2.79	3.81	3.51	3.45	2.11	2.24	2.41	2.10	2.43	2.20	3.23	2.35	15.87	4.348	14.72
4	2.32	2.79	2.74	3.51	3.45	3.37	3.43	2.41	3.25	3.59	3.31	3.23	2.35	14.8	6.795	18.13
5	2.32	2.79	2.74	3.51	3.45	3.37	3.43	2.41	2.10	2.43	2.20	2.13	2.35	14.8	6.795	13.62
6	1.00	2.79	2.74	2.48	2.18	3.37	3.43	1.00	2.10	2.43	2.20	3.23	2.35	11.19	6.795	13.31
7	3.56	3.89	2.74	2.48	3.45	2.11	3.43	2.41	1.00	2.43	1.00	2.13	2.35	16.12	5.54	11.32
8	3.56	1.79	1.87	3.51	3.45	4.78	4.71	3.52	3.25	2.43	2.20	2.13	3.46	14.18	9.49	16.99
9	3.56	3.89	3.81	3.51	3.45	3.37	3.43	3.52	3.25	2.43	2.20	1.00	3.46	18.22	6.795	15.86
10	3.56	2.79	3.81	3.51	3.45	3.37	3.43	2.41	3.25	1.00	3.31	2.13	2.35	17.11	6.795	14.45
11	3.56	2.79	3.81	2.48	3.45	3.37	3.43	3.52	3.25	2.43	3.31	2.13	4.58	16.09	6.795	19.22
12	2.32	2.79	3.81	2.48	2.18	3.37	3.43	2.41	2.10	2.43	2.20	2.13	3.46	13.58	6.795	14.73
13	3.56	3.89	3.81	3.51	3.45	3.37	3.43	4.58	4.54	2.43	2.20	2.13	2.35	18.22	6.795	18.24
14	3.56	2.79	3.81	3.51	3.45	3.37	3.43	3.52	3.25	3.59	3.31	1.00	3.46	17.11	6.795	18.13

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
15	3.56	3.89	5.09	3.51	3.45	2.11	2.24	3.52	3.25	2.43	4.51	3.23	4.58	19.49	4.348	21.51
16	2.32	2.79	1.87	1.67	1.00	3.37	3.43	2.41	2.10	2.43	2.20	3.23	2.35	9.643	6.795	14.72
17	2.32	2.79	1.87	2.48	2.18	2.11	2.24	2.41	2.10	3.59	3.31	2.13	2.35	11.64	4.348	15.89
18	2.32	1.79	1.87	1.67	3.45	2.11	2.24	2.41	3.25	2.43	2.20	2.13	2.35	11.1	4.348	14.76
19	2.32	1.79	1.87	2.48	2.18	2.11	2.24	1.00	2.10	2.43	3.31	2.13	2.35	10.65	4.348	13.33
20	2.32	2.79	2.74	2.48	2.18	3.37	3.43	3.52	2.10	3.59	3.31	3.23	2.35	12.51	6.795	18.1
21	3.56	2.79	2.74	2.48	3.45	3.37	3.43	3.52	4.54	4.71	3.31	4.45	3.46	15.02	6.795	23.99
22	2.32	3.89	3.81	3.51	3.45	3.37	2.24	2.41	2.10	3.59	3.31	3.23	2.35	16.98	5.604	16.99
23	3.56	2.79	2.74	2.48	4.86	4.78	3.43	4.58	3.25	4.71	4.51	3.23	4.58	16.43	8.21	24.86
24	3.56	3.89	3.81	3.51	2.18	3.37	2.24	2.41	3.25	3.59	3.31	3.23	3.46	16.95	5.604	19.24
25	2.32	2.79	2.74	1.00	2.18	3.37	2.24	2.41	2.10	2.43	3.31	2.13	2.35	11.03	5.604	14.73
26	3.56	3.89	2.74	2.48	2.18	2.11	3.43	2.41	3.25	2.43	3.31	3.23	2.35	14.85	5.54	16.97
27	3.56	3.89	3.81	3.51	3.45	2.11	2.24	2.41	3.25	3.59	3.31	3.23	2.35	18.22	4.348	18.13
28	3.56	3.89	3.81	3.51	3.45	3.37	2.24	3.52	2.10	3.59	2.20	3.23	3.46	18.22	5.604	18.1
29	3.56	2.79	3.81	3.51	3.45	2.11	3.43	2.41	3.25	2.43	2.20	3.23	3.46	17.11	5.54	16.97
30	2.32	3.89	3.81	3.51	2.18	3.37	2.24	2.41	2.10	2.43	2.20	2.13	2.35	15.71	5.604	13.62
31	4.86	3.89	3.81	3.51	3.45	3.37	3.43	3.52	3.25	3.59	4.51	4.45	3.46	19.52	6.795	22.77
32	3.56	3.89	3.81	3.51	3.45	4.78	4.71	4.58	3.25	4.71	3.31	4.45	4.58	18.22	9.49	24.88
33	3.56	3.89	3.81	3.51	3.45	2.11	3.43	2.41	3.25	3.59	3.31	2.13	3.46	18.22	5.54	18.14
34	3.56	3.89	3.81	2.48	2.18	3.37	2.24	3.52	2.10	3.59	2.20	2.13	2.35	15.92	5.604	15.89

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
35	4.86	5.09	5.09	3.51	4.86	3.37	3.43	3.52	3.25	3.59	4.51	4.45	3.46	23.41	6.795	22.77
36	4.86	3.89	5.09	4.68	3.45	4.78	3.43	4.58	4.54	4.71	3.31	4.45	4.58	21.97	8.21	26.17
37	3.56	3.89	3.81	2.48	2.18	3.37	3.43	3.52	3.25	3.59	2.20	3.23	2.35	15.92	6.795	18.13
38	3.56	3.89	5.09	3.51	3.45	3.37	3.43	4.58	4.54	4.71	4.51	3.23	4.58	19.49	6.795	26.15
39	2.32	2.79	2.74	2.48	3.45	2.11	3.43	2.41	2.10	3.59	2.20	3.23	3.46	13.78	5.54	16.98
40	3.56	3.89	3.81	3.51	3.45	3.37	3.43	2.41	2.10	2.43	2.20	2.13	3.46	18.22	6.795	14.73
41	2.32	2.79	2.74	2.48	2.18	2.11	3.43	2.41	2.10	2.43	2.20	2.13	2.35	12.51	5.54	13.62
42	3.56	2.79	2.74	2.48	2.18	2.11	2.24	3.52	2.10	2.43	2.20	2.13	2.35	13.75	4.348	14.73
43	2.32	3.89	2.74	3.51	2.18	3.37	2.24	3.52	3.25	2.43	2.20	2.13	3.46	14.64	5.604	16.99
44	2.32	2.79	3.81	3.51	3.45	2.11	3.43	2.41	3.25	2.43	3.31	3.23	3.46	15.87	5.54	18.08
45	3.56	2.79	2.74	3.51	3.45	2.11	2.24	3.52	3.25	3.59	2.20	3.23	2.35	16.04	4.348	18.13
46	2.32	3.89	2.74	2.48	3.45	2.11	2.24	2.41	3.25	2.43	3.31	3.23	2.35	14.88	4.348	16.97
47	3.56	3.89	5.09	4.68	4.86	4.78	4.71	4.58	4.54	3.59	4.51	3.23	4.58	22.08	9.49	25.03
48	2.32	2.79	3.81	3.51	2.18	3.37	3.43	3.52	3.25	2.43	3.31	2.13	2.35	14.61	6.795	16.99
49	3.56	3.89	5.09	3.51	4.86	4.78	3.43	3.52	4.54	4.71	3.31	4.45	4.58	20.91	8.21	25.11
50	3.56	3.89	2.74	3.51	3.45	2.11	2.24	2.41	3.25	3.59	3.31	3.23	2.35	17.14	4.348	18.13
51	3.56	2.79	3.81	2.48	2.18	2.11	2.24	2.41	3.25	3.59	3.31	2.13	3.46	14.82	4.348	18.14
52	3.56	2.79	3.81	2.48	3.45	3.37	2.24	2.41	2.10	2.43	3.31	3.23	2.35	16.09	5.604	15.83
53	2.32	1.79	2.74	1.67	2.18	1.00	1.00	1.00	1.00	2.43	1.00	1.00	1.00	10.7	2	7.43
54	3.56	2.79	3.81	3.51	3.45	2.11	2.24	2.41	3.25	2.43	3.31	3.23	3.46	17.11	4.348	18.08



No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
55	3.56	5.09	3.81	4.68	4.86	3.37	4.71	4.58	3.25	4.71	3.31	4.45	4.58	21.99	8.075	24.88
56	3.56	5.09	3.81	4.68	4.86	4.78	3.43	3.52	4.54	4.71	3.31	3.23	4.58	21.99	8.21	23.89
57	3.56	5.09	5.09	4.68	3.45	3.37	3.43	4.58	4.54	4.71	4.51	3.23	4.58	21.86	6.795	26.15
58	4.86	3.89	3.81	4.68	4.86	4.78	4.71	3.52	4.54	3.59	3.31	4.45	4.58	22.1	9.49	23.99
59	2.32	3.89	2.74	3.51	3.45	3.37	3.43	2.41	3.25	3.59	3.31	3.23	2.35	15.9	6.795	18.13
60	2.32	3.89	2.74	2.48	3.45	3.37	3.43	3.52	3.25	3.59	2.20	2.13	3.46	14.88	6.795	18.15
61	3.56	3.89	2.74	2.48	3.45	2.11	2.24	2.41	3.25	3.59	3.31	2.13	3.46	16.12	4.348	18.14
62	2.32	3.89	3.81	2.48	3.45	2.11	3.43	3.52	2.10	2.43	3.31	2.13	3.46	15.95	5.54	16.95
63	2.32	3.89	3.81	2.48	2.18	3.37	3.43	2.41	3.25	3.59	3.31	2.13	3.46	14.69	6.795	18.14
64	2.32	2.79	3.81	3.51	2.18	3.37	2.24	2.41	3.25	3.59	2.20	3.23	3.46	14.61	5.604	18.13
65	3.56	2.79	3.81	2.48	3.45	3.37	3.43	3.52	3.25	3.59	3.31	3.23	2.35	16.09	6.795	19.25
66	2.32	2.79	3.81	1.00	3.45	3.37	3.43	3.52	3.25	2.43	2.20	2.13	3.46	13.37	6.795	16.99
67	3.56	3.89	2.74	3.51	2.18	3.37	2.24	3.52	3.25	2.43	2.20	3.23	3.46	15.88	5.604	18.08
68	2.32	3.89	3.81	1.00	2.18	3.37	2.24	2.41	3.25	2.43	2.20	3.23	3.46	13.2	5.604	16.97
69	3.56	2.79	2.74	3.51	3.45	3.37	2.24	3.52	3.25	2.43	2.20	2.13	3.46	16.04	5.604	16.99
70	3.56	3.89	2.74	1.00	3.45	3.37	3.43	2.41	2.10	3.59	3.31	3.23	3.46	14.64	6.795	18.09
71	3.56	3.89	3.81	4.68	3.45	4.78	4.71	4.58	4.54	3.59	3.31	4.45	4.58	19.38	9.49	25.05
72	2.32	2.79	2.74	2.48	3.45	3.37	2.24	2.41	3.25	2.43	2.20	2.13	2.35	13.78	5.604	14.76
73	3.56	1.00	1.00	3.51	3.45	3.37	3.43	4.58	3.25	4.71	3.31	3.23	3.46	12.52	6.795	22.54
74	3.56	3.89	3.81	2.48	2.18	3.37	3.43	2.41	2.10	3.59	2.20	2.13	3.46	15.92	6.795	15.89

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
75	4.86	1.00	1.00	4.68	3.45	4.78	4.71	3.52	4.54	3.59	3.31	4.45	4.58	14.99	9.49	23.99
76	1.00	1.79	1.87	1.67	1.00	1.00	1.00	1.00	1.00	2.43	1.00	1.00	1.00	7.328	2	7.43
77	3.56	5.09	3.81	3.51	4.86	3.37	4.71	3.52	3.25	3.59	4.51	4.45	4.58	20.83	8.075	23.89
78	2.32	2.79	3.81	3.51	3.45	3.37	3.43	2.41	3.25	2.43	3.31	3.23	2.35	15.87	6.795	16.97
79	4.86	3.89	3.81	4.68	3.45	4.78	4.71	3.52	3.25	4.71	4.51	3.23	4.58	20.69	9.49	23.79
80	3.56	3.89	3.81	3.51	3.45	3.37	3.43	2.41	3.25	3.59	2.20	2.13	3.46	18.22	6.795	17.03
81	2.32	1.79	1.87	1.67	2.18	2.11	1.00	2.41	2.10	1.00	1.00	1.00	1.00	9.833	3.111	8.508
82	3.56	3.89	3.81	2.48	2.18	3.37	3.43	3.52	2.10	2.43	3.31	3.23	2.35	15.92	6.795	16.94
83	4.86	5.09	5.09	4.68	4.86	4.78	4.71	4.58	4.54	4.71	4.51	4.45	4.58	24.58	9.49	27.37
84	2.32	3.89	3.81	3.51	3.45	3.37	2.24	2.41	3.25	2.43	2.20	3.23	2.35	16.98	5.604	15.86
85	3.56	5.09	3.81	4.68	4.86	3.37	3.43	3.52	3.25	3.59	3.31	3.23	3.46	21.99	6.795	20.35
86	2.32	2.79	2.74	3.51	3.45	3.37	2.24	3.52	3.25	2.43	2.20	3.23	3.46	14.8	5.604	18.08
87	4.86	5.09	5.09	4.68	4.86	3.37	4.71	3.52	4.54	4.71	4.51	3.23	3.46	24.58	8.075	23.96
88	1.00	1.79	1.87	2.48	2.18	1.00	1.00	1.00	2.10	2.43	1.00	2.13	2.35	9.328	2	11.02
89	2.32	2.79	2.74	3.51	3.45	3.37	2.24	2.41	2.10	2.43	3.31	2.13	2.35	14.8	5.604	14.73
90	2.32	2.79	1.87	2.48	1.00	1.00	3.43	2.41	2.10	2.43	2.20	1.00	1.00	10.46	4.429	11.14
91	2.32	2.79	2.74	2.48	2.18	2.11	2.24	2.41	2.10	2.43	2.20	2.13	2.35	12.51	4.348	13.62
92	1.00	3.89	3.81	2.48	2.18	3.37	3.43	2.41	1.00	2.43	2.20	1.00	2.35	13.36	6.795	11.39
93	3.56	2.79	2.74	2.48	2.18	3.37	3.43	3.52	3.25	3.59	3.31	3.23	3.46	13.75	6.795	20.35
94	2.32	2.79	3.81	2.48	3.45	3.37	2.24	2.41	2.10	3.59	3.31	3.23	3.46	14.85	5.604	18.09

No	X1					X2		Y						X1	X2	Y
	X11	X12	X13	X14	X15	X21	X22	Y11	Y12	Y13	Y14	Y15	Y16			
95	3.56	5.09	3.81	4.68	3.45	3.37	3.43	4.58	3.25	3.59	4.51	3.23	3.46	20.58	6.795	22.61
96	3.56	5.09	3.81	4.68	3.45	3.37	4.71	4.58	4.54	3.59	3.31	3.23	3.46	20.58	8.075	22.71
97	3.56	5.09	5.09	3.51	3.45	4.78	4.71	4.58	3.25	4.71	4.51	4.45	4.58	20.69	9.49	26.08
98	4.86	3.89	3.81	3.51	3.45	3.37	4.71	4.58	4.54	4.71	4.51	3.23	3.46	19.52	8.075	25.03
99	4.86	3.89	5.09	4.68	3.45	3.37	4.71	3.52	3.25	3.59	3.31	3.23	4.58	21.97	8.075	21.48
100	4.86	5.09	5.09	3.51	3.45	3.37	3.43	4.58	3.25	3.59	4.51	4.45	3.46	22	6.795	23.83

### 3. Uji Validitas

- X1

#### Correlations

		1	2	3	4	5	X1
1	Pearson Correlation	1	.419**	.430**	.531**	.531**	.737**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	100	100	100	100	100	100
2	Pearson Correlation	.419**	1	.727**	.422**	.410**	.786**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	100	100	100	100	100	100
3	Pearson Correlation	.430**	.727**	1	.420**	.433**	.795**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	100	100	100	100	100	100

4	Pearson Correlation	.531**	.422**	.420**	1	.567**	.778**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	100	100	100	100	100	100
5	Pearson Correlation	.531**	.410**	.433**	.567**	1	.743**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	100	100	100	100	100	100
X1	Pearson Correlation	.737**	.786**	.795**	.778**	.743**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

▪ **X2**

**Correlations**

		6	7	X2
6	Pearson Correlation	1	.616**	.892**
	Sig. (2-tailed)		.000	.000
	N	100	100	100
7	Pearson Correlation	.616**	1	.906**
	Sig. (2-tailed)	.000		.000
	N	100	100	100
X2	Pearson Correlation	.892**	.906**	1
	Sig. (2-tailed)	.000	.000	

N	100	100	100
---	-----	-----	-----

\*\* Correlation is significant at the 0.01 level (2-tailed).

▪ Y

**Correlations**

	1	2	3	4	5	6	Y
1 Pearson Correlation	1	.637**	.583**	.525**	.488**	.646**	.804**
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
N	100	100	100	100	100	100	100
2 Pearson Correlation	.637**	1	.575**	.517**	.569**	.637**	.813**
Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
N	100	100	100	100	100	100	100
3 Pearson Correlation	.583**	.575**	1	.559**	.602**	.620**	.814**
Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
N	100	100	100	100	100	100	100
4 Pearson Correlation	.525**	.517**	.559**	1	.584**	.549**	.774**
Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
N	100	100	100	100	100	100	100
5 Pearson Correlation	.488**	.569**	.602**	.584**	1	.567**	.791**
Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
N	100	100	100	100	100	100	100

6	Pearson Correlation	.646**	.637**	.620**	.549**	.567**	1	.833**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	100	100	100	100	100	100	100
Y	Pearson Correlation	.804**	.813**	.814**	.774**	.791**	.833**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 4. Uji Reliabilitas

- **X1**

##### Reliability Statistics

Cronbach's Alpha	N of Items
.823	5

- **X2**

- 

##### Reliability Statistics

Cronbach's Alpha	N of Items
.761	2

- Y

**Reliability Statistics**

Cronbach's Alpha	N of Items
.891	6

**5. Uji Normalitas**

**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	2.53728691
Most Extreme Differences	Absolute	.069
	Positive	.069
	Negative	-.066
Test Statistic		.069
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

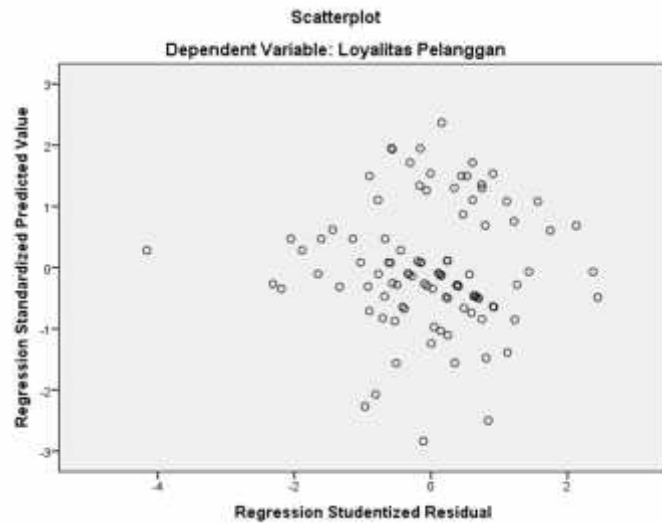
## 6. Uji Multikolinieritas

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.861	1.241		.694	.490					
Komitmen	.623	.089	.503	7.011	.000	.754	.580	.402	.640	1.563
Teknologi Informasi	1.138	.195	.419	5.834	.000	.720	.510	.335	.640	1.563

a. Dependent Variable: Loyalitas Pelanggan

## 7. Uji Heteroskedatisitas





## 8. Uji Autokorelasi

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.825 <sup>a</sup>	.681	.674	2.56328	2.108

a. Predictors: (Constant), Teknologi Informasi, Komitmen

b. Dependent Variable: Loyalitas Pelanggan

## 9. Analisis Regresi Berganda

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Teknologi Informasi, Komitmen <sup>b</sup>		Enter

a. Dependent Variable: Loyalitas Pelanggan

b. All requested variables entered.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.825 <sup>a</sup>	.681	.674	2.56328	2.108

a. Predictors: (Constant), Teknologi Informasi, Komitmen

b. Dependent Variable: Loyalitas Pelanggan

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1358.561	2	679.280	103.382	.000 <sup>b</sup>
	Residual	637.345	97	6.571		
	Total	1995.906	99			

a. Dependent Variable: Loyalitas Pelanggan

b. Predictors: (Constant), Teknologi Informasi, Komitmen

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.861	1.241		.694	.490					
Komitmen	.623	.089	.503	7.011	.000	.754	.580	.402	.640	1.563
Teknologi Informasi	1.138	.195	.419	5.834	.000	.720	.510	.335	.640	1.563

a. Dependent Variable: Loyalitas Pelanggan

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Komitmen	Teknologi Informasi
1	1	2.948	1.000	.00	.00	.00
	2	.032	9.553	.70	.00	.59
	3	.020	12.174	.29	.99	.41

a. Dependent Variable: Loyalitas Pelanggan

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	7.7030	26.9769	18.2004	3.70443	100
Std. Predicted Value	-2.834	2.369	.000	1.000	100
Standard Error of Predicted Value	.268	.792	.423	.136	100
Adjusted Predicted Value	7.7306	26.9485	18.1964	3.70303	100
Residual	-10.48629	6.14390	.00000	2.53729	100
Std. Residual	-4.091	2.397	.000	.990	100

Stud. Residual	-4.159	2.439	.001	1.005	100
Deleted Residual	-10.83665	6.36317	.00406	2.61365	100
Stud. Deleted Residual	-4.564	2.505	-.003	1.030	100
Mahal. Distance	.090	8.464	1.980	1.994	100
Cook's Distance	.000	.193	.010	.023	100
Centered Leverage Value	.001	.085	.020	.020	100

a. Dependent Variable: Loyalitas Pelanggan