

LAMPIRAN A : DATA HASIL PREDIKSI

TABEL 1. Hasil prediksi harga saham dengan PCA-SVM 6 fitur

Prediksi Harian ke-	Tanggal	Prediksi Harga Close	Harga Close Aktual	Absolute Error	Squared Error	Absolute Percentage Error (APE)
1	25/11/2021	582.31	570	12.31	151.65	2.16%
2	26/11/2021	571.72	550	21.72	471.58	3.95%
3	29/11/2021	554.85	525	29.85	891.01	5.69%
4	30/11/2021	527.45	535	7.55	56.99	1.41%
5	01/12/2021	538.16	540	1.84	3.38	0.34%
6	02/12/2021	541.90	550	8.10	65.61	1.47%
7	03/12/2021	551.39	580	28.61	818.54	4.93%
8	06/12/2021	579.28	580	0.72	0.52	0.12%
9	07/12/2021	580.20	570	10.20	104.04	1.79%
10	08/12/2021	569.82	570	0.18	0.03	0.03%
11	09/12/2021	568.29	575	6.71	45.08	1.17%
12	10/12/2021	564.52	565	0.48	0.23	0.08%
13	13/12/2021	567.97	575	7.03	49.44	1.22%
14	14/12/2021	574.95	555	19.95	398.11	3.60%
15	15/12/2021	557.31	555	2.31	5.36	0.42%
16	16/12/2021	557.24	565	7.76	60.24	1.37%
17	17/12/2021	566.61	585	18.39	338.24	3.14%
18	20/12/2021	584.05	585	0.95	0.91	0.16%
19	21/12/2021	582.71	580	2.71	7.33	0.47%
20	22/12/2021	581.18	575	6.18	38.25	1.08%
21	23/12/2021	575.32	570	5.32	28.34	0.93%
22	24/12/2021	570.02	570	0.02	0.00	0.00%
23	27/12/2021	571.18	570	1.18	1.39	0.21%
24	28/12/2021	568.14	535	33.14	1098.36	6.19%

25	29/12/2021	540.69	498	42.69	1822.19	8.57%
26	30/12/2021	507.53	490	17.53	307.16	3.58%
27	03/01/2022	500.56	498	2.56	6.54	0.51%
28	04/01/2022	503.07	510	6.93	48.02	1.36%
29	05/01/2022	510.56	510	0.56	0.31	0.11%
30	06/01/2022	518.02	505	13.02	169.62	2.58%
31	07/01/2022	506.22	505	1.22	1.50	0.24%
32	10/01/2022	507.71	550	42.29	1788.13	7.69%
33	11/01/2022	548.54	535	13.54	183.30	2.53%
34	12/01/2022	539.26	498	41.26	1702.20	8.28%
35	13/01/2022	505.32	500	5.32	28.29	1.06%
36	14/01/2022	501.15	500	1.15	1.32	0.23%
37	17/01/2022	500.10	500	0.10	0.01	0.02%
38	18/01/2022	501.10	500	1.10	1.20	0.22%
39	19/01/2022	502.58	500	2.58	6.65	0.52%
40	20/01/2022	502.54	500	2.54	6.44	0.51%
41	21/01/2022	504.41	500	4.41	19.45	0.88%
42	24/01/2022	502.19	498	4.19	17.59	0.84%
43	25/01/2022	498.84	498	0.84	0.70	0.17%
44	26/01/2022	499.47	500	0.53	0.28	0.11%
45	27/01/2022	500.55	496	4.55	20.70	0.92%
46	28/01/2022	499.75	505	5.25	27.55	1.04%
47	31/01/2022	506.89	505	1.89	3.56	0.37%
48	02/02/2022	508.18	505	3.18	10.09	0.63%
49	03/02/2022	507.23	505	2.23	4.98	0.44%
50	04/02/2022	507.22	515	7.78	60.49	1.51%
51	07/02/2022	514.27	520	5.73	32.84	1.10%
52	08/02/2022	519.74	515	4.74	22.50	0.92%

53	09/02/2022	514.30	530	15.70	246.53	2.96%
54	10/02/2022	529.76	510	19.76	390.45	3.87%
55	11/02/2022	514.62	530	15.38	236.40	2.90%
56	14/02/2022	529.19	515	14.19	201.44	2.76%
57	15/02/2022	517.03	520	2.97	8.84	0.57%
58	16/02/2022	523.06	525	1.94	3.78	0.37%
59	17/02/2022	525.71	520	5.71	32.63	1.10%
60	18/02/2022	521.75	525	3.25	10.59	0.62%
61	21/02/2022	525.34	510	15.34	235.27	3.01%
62	22/02/2022	511.72	510	1.72	2.95	0.34%
63	23/02/2022	511.72	515	3.28	10.76	0.64%
64	24/02/2022	515.80	500	15.80	249.65	3.16%
65	25/02/2022	502.18	498	4.18	17.48	0.84%
66	01/03/2022	499.01	494	5.01	25.06	1.01%
67	02/03/2022	496.55	482	14.55	211.77	3.02%
68	04/03/2022	484.56	496	11.44	130.98	2.31%
69	07/03/2022	494.12	490	4.12	16.94	0.84%
70	08/03/2022	491.50	496	4.50	20.26	0.91%
71	09/03/2022	496.53	488	8.53	72.70	1.75%
72	10/03/2022	488.50	486	2.50	6.26	0.51%
73	11/03/2022	486.32	484	2.32	5.37	0.48%
74	14/03/2022	482.44	492	9.56	91.36	1.94%
75	15/03/2022	493.18	492	1.18	1.40	0.24%
76	16/03/2022	492.80	494	1.20	1.43	0.24%
77	17/03/2022	494.62	492	2.62	6.85	0.53%
78	18/03/2022	491.77	500	8.23	67.81	1.65%
79	21/03/2022	500.56	496	4.56	20.81	0.92%
80	22/03/2022	496.83	490	6.83	46.66	1.39%

81	23/03/2022	491.74	496	4.26	18.17	0.86%
82	24/03/2022	496.38	496	0.38	0.15	0.08%
83	25/03/2022	496.01	488	8.01	64.09	1.64%
84	28/03/2022	489.05	496	6.95	48.34	1.40%
85	29/03/2022	495.21	478	17.21	296.29	3.60%
86	30/03/2022	481.61	490	8.39	70.39	1.71%
87	31/03/2022	490.48	494	3.52	12.38	0.71%
88	01/04/2022	494.24	494	0.24	0.06	0.05%
89	04/04/2022	494.24	494	0.24	0.06	0.05%
90	05/04/2022	494.88	496	1.12	1.25	0.23%
91	06/04/2022	496.35	490	6.35	40.37	1.30%
92	07/04/2022	490.08	494	3.92	15.37	0.79%
93	08/04/2022	494.11	492	2.11	4.47	0.43%
94	11/04/2022	491.69	494	2.31	5.35	0.47%
95	12/04/2022	494.15	520	25.85	668.40	4.97%
96	13/04/2022	519.79	510	9.79	95.86	1.92%
97	14/04/2022	512.98	510	2.98	8.86	0.58%
98	18/04/2022	510.20	520	9.80	95.99	1.88%
99	19/04/2022	521.64	540	18.36	337.02	3.40%
100	20/04/2022	538.49	570	31.51	992.83	5.53%
				<b>MAE</b>	<b>RMSE12.68</b>	<b>MAPE</b>
				<b>8.43</b>		<b>1.61%</b>

**Tabel Perbandingan Kelas Aktual dengan Kelas Prediksi PCA-SVM 6 fitur**

Testing ke-	Tanggal	Kelas Hasil Prediksi	Kelas Aktual	Nilai Kebenaran
1	25/11/2021	uptrend	uptrend	TRUE
2	26/11/2021	uptrend	no trend	FALSE
3	29/11/2021	no trend	no trend	TRUE

4	30/11/2021	no trend	no trend	TRUE
5	01/12/2021	no trend	no trend	TRUE
6	02/12/2021	no trend	no trend	TRUE
7	03/12/2021	no trend	uptrend	FALSE
8	06/12/2021	uptrend	no trend	FALSE
9	07/12/2021	no trend	uptrend	FALSE
10	08/12/2021	uptrend	uptrend	TRUE
11	09/12/2021	uptrend	uptrend	TRUE
12	10/12/2021	no trend	no trend	TRUE
13	13/12/2021	uptrend	uptrend	TRUE
14	14/12/2021	no trend	no trend	TRUE
15	15/12/2021	no trend	no trend	TRUE
16	16/12/2021	no trend	no trend	TRUE
17	17/12/2021	no trend	uptrend	FALSE
18	20/12/2021	uptrend	uptrend	TRUE
19	21/12/2021	uptrend	uptrend	TRUE
20	22/12/2021	uptrend	uptrend	TRUE
21	23/12/2021	uptrend	uptrend	TRUE
22	24/12/2021	uptrend	uptrend	TRUE
23	27/12/2021	uptrend	uptrend	TRUE
24	28/12/2021	uptrend	no trend	FALSE
25	29/12/2021	no trend	no trend	TRUE
26	30/12/2021	no trend	no trend	TRUE
27	03/01/2022	no trend	no trend	TRUE
28	04/01/2022	no trend	no trend	TRUE
29	05/01/2022	no trend	no trend	TRUE
30	06/01/2022	downtrend	no trend	FALSE
31	07/01/2022	downtrend	downtrend	TRUE

32	10/01/2022	downtrend	downtrend	TRUE
33	11/01/2022	downtrend	no trend	FALSE
34	12/01/2022	downtrend	no trend	FALSE
35	13/01/2022	no trend	downtrend	FALSE
36	14/01/2022	no trend	downtrend	FALSE
37	17/01/2022	downtrend	downtrend	TRUE
38	18/01/2022	downtrend	downtrend	TRUE
39	19/01/2022	downtrend	downtrend	TRUE
40	20/01/2022	downtrend	downtrend	TRUE
41	21/01/2022	downtrend	downtrend	TRUE
42	24/01/2022	downtrend	downtrend	TRUE
43	25/01/2022	downtrend	downtrend	TRUE
44	26/01/2022	downtrend	downtrend	TRUE
45	27/01/2022	downtrend	downtrend	TRUE
46	28/01/2022	downtrend	downtrend	TRUE
47	31/01/2022	downtrend	downtrend	TRUE
48	02/02/2022	downtrend	downtrend	TRUE
49	03/02/2022	downtrend	downtrend	TRUE
50	04/02/2022	downtrend	no trend	FALSE
51	07/02/2022	no trend	no trend	TRUE
52	08/02/2022	no trend	no trend	TRUE
53	09/02/2022	no trend	no trend	TRUE
54	10/02/2022	no trend	no trend	TRUE
55	11/02/2022	no trend	no trend	TRUE
56	14/02/2022	no trend	no trend	TRUE
57	15/02/2022	no trend	no trend	TRUE
58	16/02/2022	no trend	no trend	TRUE
59	17/02/2022	no trend	no trend	TRUE

60	18/02/2022	no trend	no trend	TRUE
61	21/02/2022	no trend	no trend	TRUE
62	22/02/2022	no trend	no trend	TRUE
63	23/02/2022	no trend	no trend	TRUE
64	24/02/2022	no trend	no trend	TRUE
65	25/02/2022	no trend	no trend	TRUE
66	01/03/2022	no trend	no trend	TRUE
67	02/03/2022	no trend	no trend	TRUE
68	04/03/2022	no trend	no trend	TRUE
69	07/03/2022	no trend	no trend	TRUE
70	08/03/2022	no trend	downtrend	FALSE
71	09/03/2022	downtrend	downtrend	TRUE
72	10/03/2022	downtrend	downtrend	TRUE
73	11/03/2022	downtrend	downtrend	TRUE
74	14/03/2022	downtrend	downtrend	TRUE
75	15/03/2022	downtrend	downtrend	TRUE
76	16/03/2022	downtrend	downtrend	TRUE
77	17/03/2022	downtrend	downtrend	TRUE
78	18/03/2022	downtrend	downtrend	TRUE
79	21/03/2022	downtrend	downtrend	TRUE
80	22/03/2022	downtrend	downtrend	TRUE
81	23/03/2022	downtrend	downtrend	TRUE
82	24/03/2022	downtrend	downtrend	TRUE
83	25/03/2022	downtrend	downtrend	TRUE
84	28/03/2022	downtrend	downtrend	TRUE
85	29/03/2022	downtrend	downtrend	TRUE
86	30/03/2022	downtrend	downtrend	TRUE
87	31/03/2022	downtrend	no trend	FALSE

88	01/04/2022	downtrend	no trend	FALSE
89	04/04/2022	no trend	no trend	TRUE
90	05/04/2022	no trend	no trend	TRUE
91	06/04/2022	no trend	downtrend	FALSE
92	07/04/2022	downtrend	no trend	FALSE
93	08/04/2022	no trend	no trend	TRUE
94	11/04/2022	downtrend	no trend	FALSE
95	12/04/2022	no trend	no trend	TRUE
96	13/04/2022	no trend	no trend	TRUE
97	14/04/2022	no trend	no trend	TRUE
98	18/04/2022	no trend	no trend	TRUE
99	19/04/2022	no trend	no trend	TRUE
100	20/04/2022	no trend	no trend	TRUE

TABEL 1. Hasil prediksi harga saham dengan PCA-SVM 4 fitur

Prediksi Harian ke-	Tanggal	Prediksi Harga Close	Harga Close Aktual	Absolute Error	Squared Error	Absolute Percentage Error (APE)
1	25/11/2021	582.00	570	12.00	143.95	2.10%
2	26/11/2021	571.42	550	21.42	458.96	3.90%
3	29/11/2021	554.67	525	29.67	880.19	5.65%
4	30/11/2021	527.17	535	7.83	61.37	1.46%
5	01/12/2021	537.84	540	2.16	4.66	0.40%
6	02/12/2021	541.51	550	8.49	72.02	1.54%
7	03/12/2021	550.99	580	29.01	841.74	5.00%
8	06/12/2021	578.80	580	1.20	1.45	0.21%
9	07/12/2021	579.52	570	9.52	90.63	1.67%
10	08/12/2021	569.36	570	0.64	0.41	0.11%
11	09/12/2021	567.78	575	7.22	52.09	1.26%



12	10/12/2021	552.45	565	12.55	157.62	2.22%
13	13/12/2021	567.62	575	7.38	54.53	1.28%
14	14/12/2021	574.51	555	19.51	380.78	3.52%
15	15/12/2021	556.97	555	1.97	3.89	0.36%
16	16/12/2021	556.90	565	8.10	65.55	1.43%
17	17/12/2021	566.28	585	18.72	350.61	3.20%
18	20/12/2021	583.62	585	1.38	1.91	0.24%
19	21/12/2021	582.24	580	2.24	5.03	0.39%
20	22/12/2021	580.81	575	5.81	33.72	1.01%
21	23/12/2021	574.93	570	4.93	24.35	0.87%
22	24/12/2021	569.62	570	0.38	0.15	0.07%
23	27/12/2021	570.82	570	0.82	0.67	0.14%
24	28/12/2021	567.69	535	32.69	1068.74	6.11%
25	29/12/2021	540.50	498	42.50	1806.13	8.53%
26	30/12/2021	507.45	490	17.45	304.44	3.56%
27	03/01/2022	500.45	498	2.45	6.02	0.49%
28	04/01/2022	502.71	510	7.29	53.08	1.43%
29	05/01/2022	510.03	510	0.03	0.00	0.01%
30	06/01/2022	517.77	505	12.77	163.05	2.53%
31	07/01/2022	505.75	505	0.75	0.56	0.15%
32	10/01/2022	507.29	550	42.71	1824.00	7.77%
33	11/01/2022	548.01	535	13.01	169.16	2.43%
34	12/01/2022	538.94	498	40.94	1676.04	8.22%
35	13/01/2022	505.14	500	5.14	26.40	1.03%
36	14/01/2022	500.75	500	0.75	0.57	0.15%
37	17/01/2022	499.67	500	0.33	0.11	0.07%
38	18/01/2022	500.70	500	0.70	0.50	0.14%
39	19/01/2022	502.25	500	2.25	5.08	0.45%

40	20/01/2022	502.19	500	2.19	4.81	0.44%
41	21/01/2022	504.14	500	4.14	17.14	0.83%
42	24/01/2022	501.86	498	3.86	14.86	0.77%
43	25/01/2022	498.44	498	0.44	0.20	0.09%
44	26/01/2022	499.15	500	0.85	0.72	0.17%
45	27/01/2022	500.25	496	4.25	18.04	0.86%
46	28/01/2022	499.57	505	5.43	29.45	1.07%
47	31/01/2022	506.64	505	1.64	2.69	0.32%
48	02/02/2022	507.97	505	2.97	8.81	0.59%
49	03/02/2022	507.00	505	2.00	4.00	0.40%
50	04/02/2022	507.00	515	8.00	64.04	1.55%
51	07/02/2022	513.95	520	6.05	36.57	1.16%
52	08/02/2022	519.43	515	4.43	19.59	0.86%
53	09/02/2022	513.97	530	16.03	257.06	3.03%
54	10/02/2022	529.45	510	19.45	378.32	3.81%
55	11/02/2022	514.48	530	15.52	240.84	2.93%
56	14/02/2022	528.87	515	13.87	192.27	2.69%
57	15/02/2022	516.79	520	3.21	10.34	0.62%
58	16/02/2022	522.86	525	2.14	4.59	0.41%
59	17/02/2022	525.43	520	5.43	29.53	1.04%
60	18/02/2022	521.52	525	3.48	12.14	0.66%
61	21/02/2022	525.06	510	15.06	226.67	2.95%
62	22/02/2022	511.49	510	1.49	2.23	0.29%
63	23/02/2022	511.49	515	3.51	12.31	0.68%
64	24/02/2022	515.54	500	15.54	241.55	3.11%
65	25/02/2022	501.99	498	3.99	15.88	0.80%
66	01/03/2022	498.76	494	4.76	22.62	0.96%
67	02/03/2022	496.35	482	14.35	205.98	2.98%

68	04/03/2022	484.35	496	11.65	135.76	2.35%
69	07/03/2022	493.76	490	3.76	14.14	0.77%
70	08/03/2022	491.25	496	4.75	22.59	0.96%
71	09/03/2022	496.24	488	8.24	67.95	1.69%
72	10/03/2022	488.24	486	2.24	5.00	0.46%
73	11/03/2022	486.05	484	2.05	4.20	0.42%
74	14/03/2022	482.13	492	9.87	97.43	2.01%
75	15/03/2022	492.97	492	0.97	0.94	0.20%
76	16/03/2022	492.57	494	1.43	2.03	0.29%
77	17/03/2022	494.39	492	2.39	5.69	0.48%
78	18/03/2022	491.51	500	8.49	72.06	1.70%
79	21/03/2022	500.33	496	4.33	18.72	0.87%
80	22/03/2022	496.60	490	6.60	43.59	1.35%
81	23/03/2022	491.55	496	4.45	19.84	0.90%
82	24/03/2022	496.14	496	0.14	0.02	0.03%
83	25/03/2022	495.76	488	7.76	60.16	1.59%
84	28/03/2022	488.84	496	7.16	51.33	1.44%
85	29/03/2022	494.95	478	16.95	287.44	3.55%
86	30/03/2022	481.51	490	8.49	72.07	1.73%
87	31/03/2022	490.26	494	3.74	13.97	0.76%
88	01/04/2022	494.01	494	0.01	0.00	0.00%
89	04/04/2022	494.01	494	0.01	0.00	0.00%
90	05/04/2022	494.68	496	1.32	1.75	0.27%
91	06/04/2022	496.14	490	6.14	37.75	1.25%
92	07/04/2022	489.87	494	4.13	17.07	0.84%
93	08/04/2022	493.89	492	1.89	3.59	0.38%
94	11/04/2022	491.46	494	2.54	6.44	0.51%
95	12/04/2022	493.94	520	26.06	679.38	5.01%

96	13/04/2022	519.55	510	9.55	91.26	1.87%
97	14/04/2022	512.83	510	2.83	8.00	0.55%
98	18/04/2022	509.95	520	10.05	101.04	1.93%
99	19/04/2022	521.42	540	18.58	345.22	3.44%
100	20/04/2022	538.14	570	31.86	1014.97	5.59%
				<b>MAE</b>	<b>RMSE</b>	<b>MAPE</b>
				<b>8.49</b>	<b>12.71</b>	<b>1.62%</b>

Testing ke-	Tanggal	Kelas Hasil Prediksi	Kelas Aktual	Nilai Kebenaran
1	25/11/2021	uptrend	uptrend	TRUE
2	26/11/2021	uptrend	no trend	FALSE
3	29/11/2021	no trend	no trend	TRUE
4	30/11/2021	no trend	no trend	TRUE
5	01/12/2021	no trend	no trend	TRUE
6	02/12/2021	no trend	no trend	TRUE
7	03/12/2021	no trend	uptrend	FALSE
8	06/12/2021	uptrend	no trend	FALSE
9	07/12/2021	no trend	uptrend	FALSE
10	08/12/2021	uptrend	uptrend	TRUE
11	09/12/2021	uptrend	uptrend	TRUE
12	10/12/2021	no trend	no trend	TRUE
13	13/12/2021	uptrend	uptrend	TRUE
14	14/12/2021	no trend	no trend	TRUE
15	15/12/2021	no trend	no trend	TRUE
16	16/12/2021	no trend	no trend	TRUE
17	17/12/2021	no trend	uptrend	FALSE
18	20/12/2021	uptrend	uptrend	TRUE
19	21/12/2021	uptrend	uptrend	TRUE

20	22/12/2021	uptrend	uptrend	TRUE
21	23/12/2021	uptrend	uptrend	TRUE
22	24/12/2021	uptrend	uptrend	TRUE
23	27/12/2021	uptrend	uptrend	TRUE
24	28/12/2021	uptrend	no trend	FALSE
25	29/12/2021	no trend	no trend	TRUE
26	30/12/2021	no trend	no trend	TRUE
27	03/01/2022	no trend	no trend	TRUE
28	04/01/2022	no trend	no trend	TRUE
29	05/01/2022	no trend	no trend	TRUE
30	06/01/2022	downtrend	no trend	FALSE
31	07/01/2022	downtrend	downtrend	TRUE
32	10/01/2022	downtrend	downtrend	TRUE
33	11/01/2022	downtrend	no trend	FALSE
34	12/01/2022	downtrend	no trend	FALSE
35	13/01/2022	no trend	downtrend	FALSE
36	14/01/2022	no trend	downtrend	FALSE
37	17/01/2022	downtrend	downtrend	TRUE
38	18/01/2022	downtrend	downtrend	TRUE
39	19/01/2022	downtrend	downtrend	TRUE
40	20/01/2022	downtrend	downtrend	TRUE
41	21/01/2022	downtrend	downtrend	TRUE
42	24/01/2022	downtrend	downtrend	TRUE
43	25/01/2022	downtrend	downtrend	TRUE
44	26/01/2022	downtrend	downtrend	TRUE
45	27/01/2022	downtrend	downtrend	TRUE
46	28/01/2022	downtrend	downtrend	TRUE
47	31/01/2022	downtrend	downtrend	TRUE

48	02/02/2022	downtrend	downtrend	TRUE
49	03/02/2022	downtrend	downtrend	TRUE
50	04/02/2022	downtrend	no trend	FALSE
51	07/02/2022	no trend	no trend	TRUE
52	08/02/2022	no trend	no trend	TRUE
53	09/02/2022	no trend	no trend	TRUE
54	10/02/2022	no trend	no trend	TRUE
55	11/02/2022	no trend	no trend	TRUE
56	14/02/2022	no trend	no trend	TRUE
57	15/02/2022	no trend	no trend	TRUE
58	16/02/2022	no trend	no trend	TRUE
59	17/02/2022	no trend	no trend	TRUE
60	18/02/2022	no trend	no trend	TRUE
61	21/02/2022	no trend	no trend	TRUE
62	22/02/2022	no trend	no trend	TRUE
63	23/02/2022	no trend	no trend	TRUE
64	24/02/2022	no trend	no trend	TRUE
65	25/02/2022	no trend	no trend	TRUE
66	01/03/2022	no trend	no trend	TRUE
67	02/03/2022	no trend	no trend	TRUE
68	04/03/2022	no trend	no trend	TRUE
69	07/03/2022	no trend	no trend	TRUE
70	08/03/2022	no trend	downtrend	FALSE
71	09/03/2022	downtrend	downtrend	TRUE
72	10/03/2022	downtrend	downtrend	TRUE
73	11/03/2022	downtrend	downtrend	TRUE
74	14/03/2022	downtrend	downtrend	TRUE
75	15/03/2022	downtrend	downtrend	TRUE

76	16/03/2022	downtrend	downtrend	TRUE
77	17/03/2022	downtrend	downtrend	TRUE
78	18/03/2022	downtrend	downtrend	TRUE
79	21/03/2022	downtrend	downtrend	TRUE
80	22/03/2022	downtrend	downtrend	TRUE
81	23/03/2022	downtrend	downtrend	TRUE
82	24/03/2022	downtrend	downtrend	TRUE
83	25/03/2022	downtrend	downtrend	TRUE
84	28/03/2022	downtrend	downtrend	TRUE
85	29/03/2022	downtrend	downtrend	TRUE
86	30/03/2022	downtrend	downtrend	TRUE
87	31/03/2022	downtrend	no trend	FALSE
88	01/04/2022	downtrend	no trend	FALSE
89	04/04/2022	no trend	no trend	TRUE
90	05/04/2022	no trend	no trend	TRUE
91	06/04/2022	no trend	downtrend	FALSE
92	07/04/2022	downtrend	no trend	FALSE
93	08/04/2022	no trend	no trend	TRUE
94	11/04/2022	downtrend	no trend	FALSE
95	12/04/2022	no trend	no trend	TRUE
96	13/04/2022	no trend	no trend	TRUE
97	14/04/2022	no trend	no trend	TRUE
98	18/04/2022	no trend	no trend	TRUE
99	19/04/2022	no trend	no trend	TRUE
100	20/04/2022	no trend	no trend	TRUE

TABEL 1. Hasil prediksi harga saham dengan SVM

Prediksi Harian ke-	Tanggal	Prediksi Harga Close	Harga Close Aktual	Absolute Error	Squared Error	Absolute Percentage Error (APE)
1	25/11/2021	585.99	570	15.99	255.65	2.81%
2	26/11/2021	577.86	550	27.86	776.10	5.07%
3	29/11/2021	567.63	525	42.63	1817.26	8.12%
4	30/11/2021	534.85	535	0.15	0.02	0.03%
5	01/12/2021	538.23	540	1.77	3.15	0.33%
6	02/12/2021	545.02	550	4.98	24.82	0.91%
7	03/12/2021	550.21	580	29.79	887.24	5.14%
8	06/12/2021	574.33	580	5.67	32.16	0.98%
9	07/12/2021	580.09	570	10.09	101.80	1.77%
10	08/12/2021	571.98	570	1.98	3.92	0.35%
11	09/12/2021	567.12	575	7.88	62.12	1.37%
12	10/12/2021	564.52	565	0.48	0.23	0.09%
13	13/12/2021	572.94	575	2.06	4.24	0.36%
14	14/12/2021	576.99	555	21.99	483.62	3.96%
15	15/12/2021	563.84	555	8.84	78.21	1.59%
16	16/12/2021	562.88	565	2.12	4.48	0.37%
17	17/12/2021	569.03	585	15.97	255.18	2.73%
18	20/12/2021	579.31	585	5.69	32.40	0.97%
19	21/12/2021	581.10	580	1.10	1.21	0.19%
20	22/12/2021	583.04	575	8.04	64.69	1.40%
21	23/12/2021	577.02	570	7.02	49.25	1.23%
22	24/12/2021	568.19	570	1.81	3.26	0.32%
23	27/12/2021	574.94	570	4.94	24.42	0.87%
24	28/12/2021	564.26	535	29.26	856.41	5.47%
25	29/12/2021	552.72	498	54.72	2994.74	10.99%
26	30/12/2021	518.77	490	28.77	827.56	5.87%



27	03/01/2022	512.91	498	14.91	222.42	2.99%
28	04/01/2022	504.51	510	5.49	30.19	1.08%
29	05/01/2022	509.83	510	0.17	0.03	0.03%
30	06/01/2022	523.11	505	18.11	328.03	3.59%
31	07/01/2022	509.07	505	4.07	16.54	0.81%
32	10/01/2022	511.07	550	38.93	1515.57	7.08%
33	11/01/2022	539.58	535	4.58	21.01	0.86%
34	12/01/2022	545.00	498	47.00	2209.13	9.44%
35	13/01/2022	518.63	500	18.63	346.97	3.73%
36	14/01/2022	501.94	500	1.94	3.76	0.39%
37	17/01/2022	500.54	500	0.54	0.30	0.11%
38	18/01/2022	502.36	500	2.36	5.57	0.47%
39	19/01/2022	506.81	500	6.81	46.39	1.36%
40	20/01/2022	504.80	500	4.80	23.08	0.96%
41	21/01/2022	507.73	500	7.73	59.73	1.55%
42	24/01/2022	506.06	498	8.06	65.01	1.62%
43	25/01/2022	500.50	498	2.50	6.27	0.50%
44	26/01/2022	503.60	500	3.60	12.95	0.72%
45	27/01/2022	501.37	496	5.37	28.88	1.08%
46	28/01/2022	503.14	505	1.86	3.48	0.37%
47	31/01/2022	506.63	505	1.63	2.64	0.32%
48	02/02/2022	511.10	505	6.10	37.27	1.21%
49	03/02/2022	512.92	505	7.92	62.72	1.57%
50	04/02/2022	512.92	515	2.08	4.31	0.40%
51	07/02/2022	511.68	520	8.32	69.28	1.60%
52	08/02/2022	519.17	515	4.17	17.37	0.81%
53	09/02/2022	513.18	530	16.82	282.96	3.17%
54	10/02/2022	526.30	510	16.30	265.77	3.20%

55	11/02/2022	522.87	530	7.13	50.85	1.35%
56	14/02/2022	530.06	515	15.06	226.94	2.93%
57	15/02/2022	519.12	520	0.88	0.78	0.17%
58	16/02/2022	527.98	525	2.98	8.87	0.57%
59	17/02/2022	523.28	520	3.28	10.76	0.63%
60	18/02/2022	527.88	525	2.88	8.32	0.55%
61	21/02/2022	525.16	510	15.16	229.69	2.97%
62	22/02/2022	516.94	510	6.94	48.13	1.36%
63	23/02/2022	516.93	515	1.93	3.73	0.38%
64	24/02/2022	518.06	500	18.06	326.01	3.61%
65	25/02/2022	508.70	498	10.70	114.55	2.15%
66	01/03/2022	502.03	494	8.03	64.49	1.63%
67	02/03/2022	500.46	482	18.46	340.66	3.83%
68	04/03/2022	489.66	496	6.34	40.17	1.28%
69	07/03/2022	488.78	490	1.22	1.48	0.25%
70	08/03/2022	491.78	496	4.22	17.77	0.85%
71	09/03/2022	496.18	488	8.18	66.93	1.68%
72	10/03/2022	490.09	486	4.09	16.73	0.84%
73	11/03/2022	487.71	484	3.71	13.74	0.77%
74	14/03/2022	481.77	492	10.23	104.57	2.08%
75	15/03/2022	491.67	492	0.33	0.11	0.07%
76	16/03/2022	494.11	494	0.11	0.01	0.02%
77	17/03/2022	494.96	492	2.96	8.73	0.60%
78	18/03/2022	491.75	500	8.25	68.10	1.65%
79	21/03/2022	502.09	496	6.09	37.11	1.23%
80	22/03/2022	498.50	490	8.50	72.21	1.73%
81	23/03/2022	495.23	496	0.77	0.59	0.15%
82	24/03/2022	496.18	496	0.18	0.03	0.04%

83	25/03/2022	496.91	488	8.91	79.40	1.83%
84	28/03/2022	492.10	496	3.90	15.24	0.79%
85	29/03/2022	493.44	478	15.44	238.45	3.23%
86	30/03/2022	489.29	490	0.71	0.50	0.14%
87	31/03/2022	493.24	494	0.76	0.57	0.15%
88	01/04/2022	495.31	494	1.31	1.72	0.27%
89	04/04/2022	495.31	494	1.31	1.73	0.27%
90	05/04/2022	496.88	496	0.88	0.78	0.18%
91	06/04/2022	499.22	490	9.22	85.06	1.88%
92	07/04/2022	492.45	494	1.55	2.42	0.31%
93	08/04/2022	494.16	492	2.16	4.68	0.44%
94	11/04/2022	492.52	494	1.48	2.19	0.30%
95	12/04/2022	493.79	520	26.21	687.12	5.04%
96	13/04/2022	514.13	510	4.13	17.02	0.81%
97	14/04/2022	518.02	510	8.02	64.37	1.57%
98	18/04/2022	511.16	520	8.84	78.18	1.70%
99	19/04/2022	521.30	540	18.70	349.62	3.46%
100	20/04/2022	533.41	570	36.59	1339.05	6.42%
				<b>MAE</b>	<b>RMSE</b>	<b>MAPE</b>
				<b>9.29</b>	<b>14.21</b>	<b>1.78%</b>

Testing ke-	Tanggal	Kelas Hasil Prediksi	Kelas Aktual	Nilai Kebenaran
1	25/11/2021	uptrend	uptrend	TRUE
2	26/11/2021	uptrend	no trend	FALSE
3	29/11/2021	no trend	no trend	TRUE
4	30/11/2021	no trend	no trend	TRUE
5	01/12/2021	no trend	no trend	TRUE
6	02/12/2021	no trend	no trend	TRUE

7	03/12/2021	no trend	uptrend	FALSE
8	06/12/2021	uptrend	no trend	FALSE
9	07/12/2021	uptrend	uptrend	TRUE
10	08/12/2021	uptrend	uptrend	TRUE
11	09/12/2021	no trend	uptrend	FALSE
12	10/12/2021	no trend	no trend	TRUE
13	13/12/2021	uptrend	uptrend	TRUE
14	14/12/2021	uptrend	no trend	FALSE
15	15/12/2021	no trend	no trend	TRUE
16	16/12/2021	no trend	no trend	TRUE
17	17/12/2021	no trend	uptrend	FALSE
18	20/12/2021	uptrend	uptrend	TRUE
19	21/12/2021	uptrend	uptrend	TRUE
20	22/12/2021	uptrend	uptrend	TRUE
21	23/12/2021	uptrend	uptrend	TRUE
22	24/12/2021	no trend	uptrend	FALSE
23	27/12/2021	uptrend	uptrend	TRUE
24	28/12/2021	no trend	no trend	TRUE
25	29/12/2021	no trend	no trend	TRUE
26	30/12/2021	no trend	no trend	TRUE
27	03/01/2022	no trend	no trend	TRUE
28	04/01/2022	no trend	no trend	TRUE
29	05/01/2022	no trend	no trend	TRUE
30	06/01/2022	no trend	no trend	TRUE
31	07/01/2022	no trend	downtrend	FALSE
32	10/01/2022	downtrend	downtrend	TRUE
33	11/01/2022	downtrend	no trend	FALSE
34	12/01/2022	downtrend	no trend	FALSE

35	13/01/2022	no trend	downtrend	FALSE
36	14/01/2022	no trend	downtrend	FALSE
37	17/01/2022	downtrend	downtrend	TRUE
38	18/01/2022	downtrend	downtrend	TRUE
39	19/01/2022	downtrend	downtrend	TRUE
40	20/01/2022	downtrend	downtrend	TRUE
41	21/01/2022	downtrend	downtrend	TRUE
42	24/01/2022	downtrend	downtrend	TRUE
43	25/01/2022	downtrend	downtrend	TRUE
44	26/01/2022	downtrend	downtrend	TRUE
45	27/01/2022	downtrend	downtrend	TRUE
46	28/01/2022	downtrend	downtrend	TRUE
47	31/01/2022	downtrend	downtrend	TRUE
48	02/02/2022	downtrend	downtrend	TRUE
49	03/02/2022	downtrend	downtrend	TRUE
50	04/02/2022	no trend	no trend	TRUE
51	07/02/2022	no trend	no trend	TRUE
52	08/02/2022	no trend	no trend	TRUE
53	09/02/2022	no trend	no trend	TRUE
54	10/02/2022	no trend	no trend	TRUE
55	11/02/2022	no trend	no trend	TRUE
56	14/02/2022	no trend	no trend	TRUE
57	15/02/2022	no trend	no trend	TRUE
58	16/02/2022	no trend	no trend	TRUE
59	17/02/2022	no trend	no trend	TRUE
60	18/02/2022	no trend	no trend	TRUE
61	21/02/2022	no trend	no trend	TRUE
62	22/02/2022	no trend	no trend	TRUE

63	23/02/2022	no trend	no trend	TRUE
64	24/02/2022	no trend	no trend	TRUE
65	25/02/2022	no trend	no trend	TRUE
66	01/03/2022	no trend	no trend	TRUE
67	02/03/2022	no trend	no trend	TRUE
68	04/03/2022	no trend	no trend	TRUE
69	07/03/2022	no trend	no trend	TRUE
70	08/03/2022	no trend	downtrend	FALSE
71	09/03/2022	no trend	downtrend	FALSE
72	10/03/2022	downtrend	downtrend	TRUE
73	11/03/2022	downtrend	downtrend	TRUE
74	14/03/2022	downtrend	downtrend	TRUE
75	15/03/2022	downtrend	downtrend	TRUE
76	16/03/2022	downtrend	downtrend	TRUE
77	17/03/2022	downtrend	downtrend	TRUE
78	18/03/2022	downtrend	downtrend	TRUE
79	21/03/2022	downtrend	downtrend	TRUE
80	22/03/2022	downtrend	downtrend	TRUE
81	23/03/2022	downtrend	downtrend	TRUE
82	24/03/2022	downtrend	downtrend	TRUE
83	25/03/2022	downtrend	downtrend	TRUE
84	28/03/2022	downtrend	downtrend	TRUE
85	29/03/2022	downtrend	downtrend	TRUE
86	30/03/2022	downtrend	downtrend	TRUE
87	31/03/2022	downtrend	no trend	FALSE
88	01/04/2022	downtrend	no trend	FALSE
89	04/04/2022	no trend	no trend	TRUE
90	05/04/2022	no trend	no trend	TRUE

91	06/04/2022	no trend	downtrend	FALSE
92	07/04/2022	downtrend	no trend	FALSE
93	08/04/2022	no trend	no trend	TRUE
94	11/04/2022	downtrend	no trend	FALSE
95	12/04/2022	no trend	no trend	TRUE
96	13/04/2022	no trend	no trend	TRUE
97	14/04/2022	no trend	no trend	TRUE
98	18/04/2022	no trend	no trend	TRUE
99	19/04/2022	no trend	no trend	TRUE
100	20/04/2022	no trend	no trend	TRUE

TABEL 1. Hasil prediksi harga saham dengan Neural Network

Prediksi Harian ke-	Tanggal	Prediksi Harga Close	Harga Close Aktual	Absolute Error	Squared Error	Absolute Percentage Error (APE)
1	25/11/2021	581.63	570	11.63	135.33	2.04%
2	26/11/2021	571.72	550	21.72	471.79	3.95%
3	29/11/2021	556.68	525	31.68	1003.82	6.03%
4	30/11/2021	527.59	535	7.41	54.91	1.39%
5	01/12/2021	537.51	540	2.49	6.21	0.46%
6	02/12/2021	540.77	550	9.23	85.26	1.68%
7	03/12/2021	550.08	580	29.92	895.10	5.16%
8	06/12/2021	576.94	580	3.06	9.36	0.53%
9	07/12/2021	578.63	570	8.63	74.40	1.51%
10	08/12/2021	568.75	570	1.25	1.57	0.22%
11	09/12/2021	566.16	575	8.84	78.08	1.54%
12	10/12/2021	570.86	565	5.86	34.31	1.04%
13	13/12/2021	567.68	575	7.32	53.51	1.27%
14	14/12/2021	574.20	555	19.20	368.76	3.46%

15	15/12/2021	557.27	555	2.27	5.14	0.41%
16	16/12/2021	556.80	565	8.20	67.29	1.45%
17	17/12/2021	566.16	585	18.84	355.12	3.22%
18	20/12/2021	581.47	585	3.53	12.43	0.60%
19	21/12/2021	580.73	580	0.73	0.53	0.13%
20	22/12/2021	579.65	575	4.65	21.65	0.81%
21	23/12/2021	574.22	570	4.22	17.80	0.74%
22	24/12/2021	568.11	570	1.89	3.58	0.33%
23	27/12/2021	570.28	570	0.28	0.08	0.05%
24	28/12/2021	565.99	535	30.99	960.21	5.79%
25	29/12/2021	542.43	498	44.43	1974.17	8.92%
26	30/12/2021	510.26	490	20.26	410.37	4.13%
27	03/01/2022	503.87	498	5.87	34.46	1.18%
28	04/01/2022	502.93	510	7.07	50.05	1.39%
29	05/01/2022	508.55	510	1.45	2.10	0.28%
30	06/01/2022	519.83	505	14.83	219.85	2.94%
31	07/01/2022	505.15	505	0.15	0.02	0.03%
32	10/01/2022	506.79	550	43.21	1867.41	7.86%
33	11/01/2022	546.13	535	11.13	123.99	2.08%
34	12/01/2022	540.27	498	42.27	1786.52	8.49%
35	13/01/2022	507.30	500	7.30	53.25	1.46%
36	14/01/2022	499.64	500	0.36	0.13	0.07%
37	17/01/2022	498.21	500	1.79	3.21	0.36%
38	18/01/2022	499.47	500	0.53	0.28	0.11%
39	19/01/2022	502.20	500	2.20	4.83	0.44%
40	20/01/2022	501.37	500	1.37	1.87	0.27%
41	21/01/2022	504.46	500	4.46	19.91	0.89%
42	24/01/2022	501.62	498	3.62	13.13	0.73%



43	25/01/2022	497.24	498	0.76	0.57	0.15%
44	26/01/2022	498.67	500	1.33	1.78	0.27%
45	27/01/2022	498.76	496	2.76	7.62	0.56%
46	28/01/2022	499.82	505	5.18	26.85	1.03%
47	31/01/2022	505.96	505	0.96	0.93	0.19%
48	02/02/2022	507.82	505	2.82	7.93	0.56%
49	03/02/2022	506.91	505	1.91	3.66	0.38%
50	04/02/2022	506.90	515	8.10	65.68	1.57%
51	07/02/2022	512.49	520	7.51	56.33	1.44%
52	08/02/2022	517.93	515	2.93	8.60	0.57%
53	09/02/2022	512.47	530	17.53	307.20	3.31%
54	10/02/2022	528.22	510	18.22	331.87	3.57%
55	11/02/2022	515.63	530	14.37	206.38	2.71%
56	14/02/2022	527.83	515	12.83	164.56	2.49%
57	15/02/2022	516.26	520	3.74	13.98	0.72%
58	16/02/2022	523.22	525	1.78	3.15	0.34%
59	17/02/2022	524.29	520	4.29	18.44	0.83%
60	18/02/2022	521.74	525	3.26	10.66	0.62%
61	21/02/2022	523.88	510	13.88	192.60	2.72%
62	22/02/2022	511.33	510	1.33	1.77	0.26%
63	23/02/2022	511.35	515	3.65	13.31	0.71%
64	24/02/2022	514.86	500	14.86	220.91	2.97%
65	25/02/2022	502.15	498	4.15	17.26	0.83%
66	01/03/2022	498.03	494	4.03	16.22	0.82%
67	02/03/2022	496.09	482	14.09	198.41	2.92%
68	04/03/2022	484.11	496	11.89	141.35	2.40%
69	07/03/2022	492.16	490	2.16	4.67	0.44%
70	08/03/2022	490.51	496	5.49	30.15	1.11%

71	09/03/2022	495.14	488	7.14	50.97	1.46%
72	10/03/2022	487.21	486	1.21	1.46	0.25%
73	11/03/2022	484.98	484	0.98	0.96	0.20%
74	14/03/2022	480.83	492	11.17	124.84	2.27%
75	15/03/2022	492.25	492	0.25	0.06	0.05%
76	16/03/2022	491.73	494	2.27	5.14	0.46%
77	17/03/2022	493.36	492	1.36	1.84	0.28%
78	18/03/2022	490.37	500	9.63	92.83	1.93%
79	21/03/2022	499.17	496	3.17	10.06	0.64%
80	22/03/2022	495.57	490	5.57	31.00	1.14%
81	23/03/2022	491.10	496	4.90	24.05	0.99%
82	24/03/2022	494.97	496	1.03	1.06	0.21%
83	25/03/2022	494.57	488	6.57	43.17	1.35%
84	28/03/2022	487.95	496	8.05	64.78	1.62%
85	29/03/2022	493.49	478	15.49	239.98	3.24%
86	30/03/2022	482.24	490	7.76	60.29	1.58%
87	31/03/2022	489.62	494	4.38	19.15	0.89%
88	01/04/2022	492.96	494	1.04	1.08	0.21%
89	04/04/2022	492.95	494	1.05	1.10	0.21%
90	05/04/2022	493.91	496	2.09	4.37	0.42%
91	06/04/2022	495.59	490	5.59	31.27	1.14%
92	07/04/2022	489.23	494	4.77	22.79	0.97%
93	08/04/2022	492.76	492	0.76	0.58	0.16%
94	11/04/2022	490.46	494	3.54	12.52	0.72%
95	12/04/2022	492.77	520	27.23	741.65	5.24%
96	13/04/2022	517.82	510	7.82	61.17	1.53%
97	14/04/2022	513.11	510	3.11	9.67	0.61%
98	18/04/2022	508.79	520	11.21	125.64	2.16%

99	19/04/2022	520.44	540	19.56	382.53	3.62%
100	20/04/2022	536.00	570	34.00	1156.17	5.97%
				<b>MAE</b>	<b>RMSE</b>	<b>MAPE</b>
				<b>8.55</b>	<b>12.91</b>	<b>1.63%</b>

Testing ke-	Tanggal	Kelas Hasil Prediksi	Kelas Aktual	Nilai Kebenaran
1	25/11/2021	uptrend	uptrend	TRUE
2	26/11/2021	uptrend	no trend	FALSE
3	29/11/2021	no trend	no trend	TRUE
4	30/11/2021	no trend	no trend	TRUE
5	01/12/2021	no trend	no trend	TRUE
6	02/12/2021	no trend	no trend	TRUE
7	03/12/2021	no trend	uptrend	FALSE
8	06/12/2021	uptrend	no trend	FALSE
9	07/12/2021	no trend	uptrend	FALSE
10	08/12/2021	uptrend	uptrend	TRUE
11	09/12/2021	uptrend	uptrend	TRUE
12	10/12/2021	uptrend	no trend	FALSE
13	13/12/2021	uptrend	uptrend	TRUE
14	14/12/2021	uptrend	no trend	FALSE
15	15/12/2021	no trend	no trend	TRUE
16	16/12/2021	no trend	no trend	TRUE
17	17/12/2021	no trend	uptrend	FALSE
18	20/12/2021	uptrend	uptrend	TRUE
19	21/12/2021	uptrend	uptrend	TRUE
20	22/12/2021	uptrend	uptrend	TRUE
21	23/12/2021	uptrend	uptrend	TRUE
22	24/12/2021	uptrend	uptrend	TRUE

23	27/12/2021	uptrend	uptrend	TRUE
24	28/12/2021	no trend	no trend	TRUE
25	29/12/2021	no trend	no trend	TRUE
26	30/12/2021	no trend	no trend	TRUE
27	03/01/2022	no trend	no trend	TRUE
28	04/01/2022	no trend	no trend	TRUE
29	05/01/2022	no trend	no trend	TRUE
30	06/01/2022	no trend	no trend	TRUE
31	07/01/2022	no trend	downtrend	FALSE
32	10/01/2022	downtrend	downtrend	TRUE
33	11/01/2022	downtrend	no trend	FALSE
34	12/01/2022	downtrend	no trend	FALSE
35	13/01/2022	no trend	downtrend	FALSE
36	14/01/2022	no trend	downtrend	FALSE
37	17/01/2022	downtrend	downtrend	TRUE
38	18/01/2022	downtrend	downtrend	TRUE
39	19/01/2022	downtrend	downtrend	TRUE
40	20/01/2022	downtrend	downtrend	TRUE
41	21/01/2022	downtrend	downtrend	TRUE
42	24/01/2022	downtrend	downtrend	TRUE
43	25/01/2022	downtrend	downtrend	TRUE
44	26/01/2022	downtrend	downtrend	TRUE
45	27/01/2022	downtrend	downtrend	TRUE
46	28/01/2022	downtrend	downtrend	TRUE
47	31/01/2022	downtrend	downtrend	TRUE
48	02/02/2022	downtrend	downtrend	TRUE
49	03/02/2022	downtrend	downtrend	TRUE
50	04/02/2022	downtrend	no trend	FALSE

51	07/02/2022	no trend	no trend	TRUE
52	08/02/2022	no trend	no trend	TRUE
53	09/02/2022	no trend	no trend	TRUE
54	10/02/2022	no trend	no trend	TRUE
55	11/02/2022	no trend	no trend	TRUE
56	14/02/2022	no trend	no trend	TRUE
57	15/02/2022	no trend	no trend	TRUE
58	16/02/2022	no trend	no trend	TRUE
59	17/02/2022	no trend	no trend	TRUE
60	18/02/2022	no trend	no trend	TRUE
61	21/02/2022	no trend	no trend	TRUE
62	22/02/2022	no trend	no trend	TRUE
63	23/02/2022	no trend	no trend	TRUE
64	24/02/2022	no trend	no trend	TRUE
65	25/02/2022	no trend	no trend	TRUE
66	01/03/2022	no trend	no trend	TRUE
67	02/03/2022	no trend	no trend	TRUE
68	04/03/2022	no trend	no trend	TRUE
69	07/03/2022	no trend	no trend	TRUE
70	08/03/2022	no trend	downtrend	FALSE
71	09/03/2022	no trend	downtrend	FALSE
72	10/03/2022	downtrend	downtrend	TRUE
73	11/03/2022	downtrend	downtrend	TRUE
74	14/03/2022	downtrend	downtrend	TRUE
75	15/03/2022	downtrend	downtrend	TRUE
76	16/03/2022	downtrend	downtrend	TRUE
77	17/03/2022	downtrend	downtrend	TRUE
78	18/03/2022	downtrend	downtrend	TRUE

79	21/03/2022	downtrend	downtrend	TRUE
80	22/03/2022	downtrend	downtrend	TRUE
81	23/03/2022	downtrend	downtrend	TRUE
82	24/03/2022	downtrend	downtrend	TRUE
83	25/03/2022	downtrend	downtrend	TRUE
84	28/03/2022	downtrend	downtrend	TRUE
85	29/03/2022	downtrend	downtrend	TRUE
86	30/03/2022	downtrend	downtrend	TRUE
87	31/03/2022	downtrend	no trend	FALSE
88	01/04/2022	downtrend	no trend	FALSE
89	04/04/2022	no trend	no trend	TRUE
90	05/04/2022	no trend	no trend	TRUE
91	06/04/2022	no trend	downtrend	FALSE
92	07/04/2022	downtrend	no trend	FALSE
93	08/04/2022	no trend	no trend	TRUE
94	11/04/2022	downtrend	no trend	FALSE
95	12/04/2022	no trend	no trend	TRUE
96	13/04/2022	no trend	no trend	TRUE
97	14/04/2022	no trend	no trend	TRUE
98	18/04/2022	no trend	no trend	TRUE
99	19/04/2022	no trend	no trend	TRUE
100	20/04/2022	no trend	no trend	TRUE

COMPONENT	STD DEVIATION	PROPORTION OF VARIANCE	CUMULATIVE VARIANCE
PC 1	0.559	0.713	71.30%
PC 2	0.266	0.161	87.40%
PC 3	0.141	0.046	92.00%
PC 4	0.134	0.041	96.00%
PC 5	0.078	0.014	97.40%

PC 6	0.065	0.01	98.40%
PC 7	0.044	0.004	98.80%
PC 8	0.041	0.004	99.20%
PC 9	0.034	0.003	99.50%
PC 10	0.031	0.002	99.70%
PC 11	0.024	0.001	99.90%
PC 12	0.022	0.001	100.00%
PC 13	0.012	0	100.00%
PC 14	0.005	0	100.00%
PC 15	?	0	100.00%

atribut	PC1
25MA	0.475
65MA	0.525
25EMA	0.499
ALF	0.012
RS	0.005
RSI	-0.013
MFI	-0.097
%B	-0.005
10days	0.111
30days	0.113
CHO	0
MACD	0.463
%K	0
AD	-0.001
%R	0