

LAMPIRAN A Hasil Ekstraksi Fitur Data Latih

A.1 Hasil Ekstraksi Fitur dengan Font Arial

No	Huruf	Posisi	Fitur		
			Jumlah Titik	Posisi Titik	Chain code Ter-Normalisasi
1	Ain	Terisolasi	0	0	1, 8, 6, 5, 4, 8, 6, 6, 4, 4
2	Ain	Di awal	0	0	1, 8, 8, 6, 4, 4, 8, 8, 8, 8
3	Ain	Di tengah	0	0	4, 1, 4, 6, 5, 8, 3, 8, 7, 5
4	Ain	Di akhir	0	0	8, 3, 8, 5, 5, 8, 1, 1, 4, 7
5	Alif	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 6, 6, 6, 6
6	Alif	Di akhir	0	0	6, 6, 6, 6, 6, 6, 6, 6, 5, 4
7	Ba	Terisolasi	1	2	6, 6, 6, 5, 4, 4, 4, 4, 3, 2
8	Ba	Di awal	1	2	6, 6, 6, 6, 6, 6, 6, 8, 8, 8
9	Ba	Di tengah	1	2	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
10	Ba	Di akhir	1	2	6, 6, 4, 4, 4, 3, 2, 6, 5, 4
11	Dal	Terisolasi	0	0	5, 5, 5, 6, 6, 7, 8, 8, 8, 8
12	Dal	Di akhir	0	0	6, 6, 6, 6, 5, 4, 1, 1, 8, 8
13	Dhad	Terisolasi	1	0	6, 3, 6, 8, 4, 2, 7, 6, 8, 2
14	Dhad	Di awal	1	0	6, 3, 4, 6, 8, 4, 3, 8, 7, 8
15	Dhad	Di tengah	1	0	6, 2, 4, 5, 8, 4, 8, 1, 7, 8
16	Dhad	Di akhir	1	0	6, 3, 6, 8, 4, 8, 8, 8, 8, 2
17	Dzal	Terisolasi	1	0	5, 5, 5, 6, 6, 7, 8, 8, 8, 8

18	Dzal	Di akhir	1	0	6, 6, 6, 6, 5, 4, 1, 1, 8, 8
19	Dzo	Terisolasi	1	0	6, 6, 3, 5, 8, 8, 6, 3, 8, 7
20	Dzo	Di awal	1	0	6, 6, 3, 5, 8, 8, 6, 4, 8, 8
21	Dzo	Di tengah	1	0	6, 6, 3, 6, 8, 8, 4, 8, 8, 8
22	Dzo	Di akhir	1	0	6, 6, 3, 6, 8, 8, 4, 8, 1, 8
23	Fa	Terisolasi	1	0	6, 5, 4, 8, 2, 5, 6, 1, 6, 4
24	Fa	Di awal	1	0	4, 3, 8, 2, 4, 6, 2, 8, 6, 4
25	Fa	Di tengah	1	0	4, 1, 4, 6, 4, 4, 1, 1, 7, 6
26	Fa	Di akhir	1	0	6, 4, 4, 2, 5, 4, 8, 2, 8, 5
27	Ghoin	Terisolasi	1	0	1, 8, 6, 5, 4, 8, 6, 6, 4, 4
28	Ghoin	Di awal	1	0	1, 8, 8, 6, 4, 4, 8, 8, 8, 8
29	Ghoin	Di tengah	1	0	4, 1, 4, 5, 5, 8, 4, 8, 7, 5
30	Ghoin	Di akhir	1	0	8, 1, 8, 5, 5, 4, 8, 1, 4, 7
31	Habesar	Terisolasi	0	0	5, 6, 8, 2, 3, 7, 6, 4, 2, 1
32	Habesar	Di awal	0	0	4, 4, 6, 2, 7, 4, 4, 8, 4, 6
33	Habesar	Di tengah	0	0	4, 3, 4, 6, 2, 6, 2, 8, 1, 6
34	Habesar	Di akhir	0	0	6, 6, 8, 2, 3, 7, 6, 4, 2, 2
35	Hamzah	Terisolasi	0	0	8, 8, 7, 6, 5, 4, 4, 8, 8, 8
36	Ha	Terisolasi	0	0	4, 4, 7, 7, 6, 6, 5, 4, 4, 4
37	Ha	Di awal	0	0	4, 4, 4, 4, 5, 8, 8, 8, 8, 8
38	Ha	Di tengah	0	0	4, 4, 7, 5, 4, 8, 1, 8, 8, 8

39	Ha	Di akhir	0	0	4, 7, 6, 4, 5, 8, 8, 8, 2, 4
40	Jim	Terisolasi	1	1	4, 4, 7, 7, 6, 6, 5, 4, 4, 4
41	Jim	Di awal	1	1	4, 4, 4, 4, 5, 8, 8, 8, 8, 8
42	Jim	Di tengah	1	1	4, 4, 7, 5, 4, 8, 1, 8, 8, 8
43	Jim	Di akhir	1	1	4, 7, 6, 4, 5, 8, 1, 8, 2, 4
44	Kaf	Terisolasi	1	0	6, 6, 6, 6, 6, 7, 8, 8, 1, 2
45	Kaf	Di awal	1	0	8, 7, 6, 5, 5, 6, 6, 8, 8, 8
46	Kaf	Di tengah	1	0	8, 7, 6, 5, 6, 4, 8, 4, 8, 1
47	Kaf	Di akhir	1	0	6, 6, 6, 6, 5, 1, 8, 8, 1, 2
48	Kha	Terisolasi	1	0	4, 4, 7, 7, 6, 6, 5, 4, 4, 4
49	Kha	Di awal	1	0	4, 4, 4, 5, 5, 8, 8, 8, 8, 8
50	Kha	Di tengah	1	0	4, 4, 7, 5, 4, 8, 1, 8, 8, 8
51	Kha	Di akhir	1	0	4, 7, 6, 4, 5, 8, 1, 8, 2, 4
52	Lamalif	Terisolasi	0	0	6, 6, 6, 6, 6, 1, 8, 4, 2, 5
53	Lamalif	Di akhir	0	0	6, 6, 6, 6, 6, 8, 8, 5, 8, 8
54	Lam	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 8, 8, 2, 2
55	Lam	Di awal	0	0	6, 6, 6, 6, 6, 6, 6, 6, 8, 8
56	Lam	Di tengah	0	0	6, 6, 6, 6, 6, 6, 6, 4, 8, 8
57	Lam	Di akhir	0	0	6, 6, 6, 6, 4, 8, 7, 8, 1, 2
58	Mim	Terisolasi	0	0	2, 2, 2, 4, 6, 8, 3, 2, 7, 6
59	Mim	Di awal	0	0	4, 2, 3, 5, 8, 4, 2, 8, 7, 6

60	Mim	Di tengah	0	0	4, 2, 5, 5, 7, 4, 8, 2, 7, 6
61	Mim	Di akhir	0	0	8, 1, 6, 3, 6, 2, 4, 8, 4, 6
62	Nun	Terisolasi	1	0	6, 6, 6, 5, 4, 4, 3, 2, 2, 2
63	Nun	Di awal	1	0	6, 6, 6, 6, 6, 7, 7, 8, 8, 8
64	Nun	Di tengah	1	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
65	Nun	Di akhir	1	0	6, 6, 6, 4, 4, 4, 3, 2, 6, 4
66	Qaf	Terisolasi	2	0	6, 5, 4, 2, 2, 5, 6, 1, 6, 4
67	Qaf	Di awal	2	0	4, 2, 2, 3, 5, 6, 1, 7, 6, 4
68	Qaf	Di tengah	2	0	4, 2, 4, 6, 4, 4, 1, 1, 7, 6
69	Qaf	Di akhir	2	0	6, 4, 3, 1, 3, 6, 8, 1, 6, 4
70	Ra	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 7, 8, 8, 8
71	Ra	Di akhir	0	0	6, 6, 4, 4, 8, 7, 6, 8, 8, 8
72	Sad	Terisolasi	0	0	6, 3, 6, 8, 4, 2, 7, 6, 8, 2
73	Sad	Di awal	0	0	6, 3, 4, 6, 8, 4, 3, 8, 7, 8
74	Sad	Di tengah	0	0	6, 2, 4, 5, 8, 4, 8, 1, 7, 8
75	Sad	Di akhir	0	0	6, 3, 6, 8, 4, 8, 8, 8, 8, 2
76	Sheen	Terisolasi	3	0	6, 8, 2, 7, 2, 6, 6, 8, 1, 2
77	Sheen	Di awal	3	0	6, 6, 8, 2, 6, 8, 1, 2, 6, 8
78	Sheen	Di tengah	3	0	6, 6, 8, 8, 2, 6, 2, 2, 6, 8
79	Sheen	Di akhir	3	0	6, 5, 8, 2, 7, 2, 6, 7, 8, 2
80	Sin	Terisolasi	0	0	6, 8, 2, 7, 2, 6, 6, 8, 1, 2

81	Sin	Di awal	0	0	6, 6, 8, 2, 6, 6, 1, 2, 6, 8
82	Sin	Di tengah	0	0	6, 6, 8, 2, 6, 7, 2, 2, 6, 8
83	Sin	Di akhir	0	0	6, 5, 7, 2, 6, 2, 6, 7, 8, 2
84	Tamarbuto	Terisolasi	2	0	5, 6, 8, 1, 2, 6, 5, 4, 2, 1
85	Tamarbuto	Di akhir	2	0	6, 6, 8, 2, 3, 7, 6, 4, 2, 2
86	Ta	Terisolasi	2	0	6, 6, 6, 5, 4, 4, 4, 4, 3, 2
87	Ta	Di awal	2	0	6, 6, 6, 6, 6, 6, 6, 8, 8, 8
88	Ta	Di tengah	2	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
89	Ta	Di akhir	2	0	6, 6, 4, 4, 4, 3, 2, 6, 5, 4
90	Tho	Terisolasi	0	0	6, 6, 3, 5, 8, 8, 4, 4, 8, 8
91	Tho	Di awal	0	0	6, 6, 3, 5, 8, 8, 4, 4, 8, 8
92	Tho	Di tengah	0	0	6, 6, 3, 6, 8, 2, 4, 8, 1, 7
93	Tho	Di akhir	0	0	6, 6, 3, 6, 8, 8, 4, 8, 1, 8
94	Tsa	Terisolasi	3	0	6, 6, 6, 5, 4, 4, 4, 4, 3, 2
95	Tsa	Di awal	3	0	6, 6, 6, 6, 6, 6, 6, 6, 8, 8
96	Tsa	Di tengah	3	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
97	Tsa	Di akhir	3	0	6, 6, 4, 4, 4, 3, 2, 6, 5, 4
98	Waw	Terisolasi	0	0	4, 4, 2, 1, 7, 4, 8, 2, 5, 6
99	Waw	Di akhir	0	0	8, 1, 6, 4, 8, 4, 3, 2, 5, 6
100	Ya	Terisolasi	2	2	1, 8, 7, 5, 5, 7, 8, 8, 1, 2
101	Ya	Di awal	2	2	6, 6, 6, 6, 6, 7, 7, 8, 8, 8

102	Ya	Di tengah	2	2	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
103	Ya	Di akhir	2	2	6, 6, 4, 4, 4, 4, 4, 2, 4, 4
104	Za	Terisolasi	1	0	6, 6, 6, 6, 6, 6, 7, 8, 8, 8
105	Za	Di akhir	1	0	6, 6, 4, 4, 8, 7, 6, 8, 8, 8

#### A.2 Hasil Ekstraksi Fitur dengan Font Tahoma

No	Huruf	Posisi	Fitur		
			Jumlah Titik	Posisi Titik	Chain code Ter-Normalisasi
1	Ain	Terisolasi	0	0	8, 7, 6, 4, 8, 7, 6, 4, 4, 2
2	Ain	Di awal	0	0	8, 8, 7, 5, 4, 4, 8, 8, 8, 8
3	Ain	Di tengah	0	0	4, 1, 4, 6, 5, 4, 1, 2, 8, 5
4	Ain	Di akhir	0	0	8, 1, 8, 6, 5, 4, 8, 3, 4, 7
5	Alif	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 6, 6, 6, 6
6	Alif	Di akhir	0	0	6, 6, 6, 6, 6, 6, 6, 6, 5, 4
7	Ba	Terisolasi	1	2	6, 6, 7, 8, 8, 8, 8, 1, 2, 2
8	Ba	Di awal	1	2	6, 6, 6, 6, 6, 6, 6, 8, 8, 8
9	Ba	Di tengah	1	2	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
10	Ba	Di akhir	1	2	6, 6, 4, 4, 4, 4, 4, 2, 6, 4
11	Dal	Terisolasi	0	0	5, 5, 5, 5, 6, 6, 8, 8, 8, 8
12	Dal	Di akhir	0	0	6, 6, 6, 5, 4, 1, 7, 8, 8, 8

13	Dhad	Terisolasi	1	0	6, 5, 2, 4, 3, 8, 8, 4, 8, 6
14	Dhad	Di awal	1	0	6, 3, 4, 7, 8, 4, 4, 1, 7, 8
15	Dhad	Di tengah	1	0	6, 3, 5, 4, 8, 4, 4, 2, 7, 8
16	Dhad	Di akhir	1	0	6, 4, 2, 3, 6, 8, 4, 4, 1, 6
17	Dzal	Terisolasi	1	0	5, 5, 5, 5, 6, 6, 8, 8, 8, 8
18	Dzal	Di akhir	1	0	6, 6, 6, 5, 4, 1, 7, 8, 8, 8
19	Dzo	Terisolasi	1	0	6, 6, 3, 6, 8, 8, 6, 4, 1, 8
20	Dzo	Di awal	1	0	6, 6, 4, 5, 8, 2, 6, 4, 1, 8
21	Dzo	Di tengah	1	0	6, 6, 3, 6, 8, 2, 6, 4, 2, 8
22	Dzo	Di akhir	1	0	6, 6, 3, 6, 8, 8, 4, 4, 1, 8
23	Fa	Terisolasi	1	0	6, 5, 4, 4, 1, 6, 4, 8, 4, 6
24	Fa	Di awal	1	0	4, 4, 2, 1, 6, 4, 8, 2, 4, 6
25	Fa	Di tengah	1	0	4, 1, 4, 6, 4, 4, 1, 2, 7, 5
26	Fa	Di akhir	1	0	6, 4, 4, 2, 6, 4, 4, 3, 8, 5
27	Ghoin	Terisolasi	1	0	8, 7, 6, 4, 8, 7, 6, 4, 4, 2
28	Ghoin	Di awal	1	0	8, 8, 7, 5, 4, 4, 8, 8, 8, 8
29	Ghoin	Di tengah	1	0	4, 1, 4, 6, 5, 4, 1, 2, 8, 5
30	Ghoin	Di akhir	1	0	8, 1, 8, 6, 5, 4, 8, 3, 4, 7
31	Habesar	Terisolasi	0	0	4, 5, 6, 1, 2, 7, 6, 4, 2, 1
32	Habesar	Di awal	0	0	4, 5, 8, 1, 6, 4, 4, 2, 4, 6
33	Habesar	Di tengah	0	0	4, 2, 5, 7, 2, 7, 7, 3, 8, 6

34	Habesar	Di akhir	0	0	8, 2, 2, 8, 5, 4, 1, 4, 6, 6
35	Hamzah	Terisolasi	0	0	8, 8, 7, 6, 5, 4, 4, 8, 8, 8
36	Ha	Terisolasi	0	0	4, 4, 8, 6, 4, 4, 8, 1, 3, 8
37	Ha	Di awal	0	0	4, 4, 5, 2, 8, 8, 4, 4, 3, 8
38	Ha	Di tengah	0	0	4, 4, 2, 4, 8, 8, 4, 8, 3, 8
39	Ha	Di akhir	0	0	4, 4, 5, 7, 4, 7, 8, 3, 2, 8
40	Jim	Terisolasi	1	1	4, 4, 8, 6, 4, 4, 8, 1, 3, 8
41	Jim	Di awal	1	1	4, 4, 4, 7, 8, 8, 4, 4, 3, 8
42	Jim	Di tengah	1	1	4, 4, 2, 4, 8, 8, 4, 8, 1, 8
43	Jim	Di akhir	1	1	4, 4, 5, 7, 4, 7, 8, 3, 2, 8
44	Kaf	Terisolasi	1	0	6, 6, 6, 6, 6, 8, 8, 8, 8, 2
45	Kaf	Di awal	1	0	7, 6, 5, 5, 6, 6, 8, 8, 8, 8
46	Kaf	Di tengah	1	0	7, 6, 5, 5, 6, 4, 8, 8, 8, 8
47	Kaf	Di akhir	1	0	6, 6, 6, 6, 6, 8, 8, 8, 8, 2
48	Kha	Terisolasi	1	0	4, 4, 8, 6, 4, 4, 8, 1, 3, 8
49	Kha	Di awal	1	0	4, 4, 4, 7, 8, 8, 4, 4, 3, 8
50	Kha	Di tengah	1	0	4, 4, 2, 4, 8, 8, 4, 8, 1, 8
51	Kha	Di akhir	1	0	4, 4, 6, 7, 4, 7, 8, 3, 2, 8
52	Lamalif	Terisolasi	0	0	6, 6, 6, 6, 6, 8, 2, 6, 7, 8
53	Lamalif	Di akhir	0	0	6, 6, 6, 6, 4, 1, 2, 2, 6, 8
54	Lam	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 8, 8, 2, 2



55	Lam	Di awal	0	0	6, 6, 6, 6, 6, 6, 6, 6, 6, 8
56	Lam	Di tengah	0	0	6, 6, 6, 6, 6, 6, 6, 5, 1, 8
57	Lam	Di akhir	0	0	6, 6, 6, 6, 6, 8, 7, 8, 2, 2
58	Mim	Terisolasi	0	0	4, 3, 3, 5, 8, 1, 4, 2, 7, 6
59	Mim	Di awal	0	0	4, 2, 4, 6, 8, 5, 4, 2, 7, 6
60	Mim	Di tengah	0	0	4, 2, 5, 5, 8, 5, 2, 2, 7, 6
61	Mim	Di akhir	0	0	8, 1, 6, 4, 7, 3, 7, 1, 4, 6
62	Nun	Terisolasi	1	0	6, 6, 6, 5, 4, 4, 4, 2, 2, 2
63	Nun	Di awal	1	0	6, 6, 6, 6, 6, 6, 6, 6, 8, 8
64	Nun	Di tengah	1	0	6, 6, 6, 6, 6, 4, 4, 8, 8, 8
65	Nun	Di akhir	1	0	6, 6, 5, 4, 4, 4, 2, 2, 5, 4
66	Qaf	Terisolasi	2	0	6, 4, 4, 2, 2, 6, 4, 1, 4, 6
67	Qaf	Di awal	2	0	4, 4, 2, 1, 6, 4, 8, 2, 4, 6
68	Qaf	Di tengah	2	0	4, 2, 4, 6, 4, 4, 3, 2, 7, 5
69	Qaf	Di akhir	2	0	6, 4, 4, 2, 8, 5, 4, 8, 3, 6
70	Ra	Terisolasi	0	0	5, 6, 6, 6, 6, 6, 7, 8, 8, 8
71	Ra	Di akhir	0	0	5, 6, 6, 4, 8, 8, 6, 7, 8, 8
72	Sad	Terisolasi	0	0	6, 5, 2, 4, 3, 8, 8, 4, 8, 6
73	Sad	Di awal	0	0	6, 3, 4, 7, 8, 4, 4, 1, 7, 8
74	Sad	Di tengah	0	0	6, 3, 6, 4, 8, 4, 4, 2, 7, 8
75	Sad	Di akhir	0	0	6, 4, 2, 3, 6, 8, 4, 4, 1, 6

76	Sheen	Terisolasi	3	0	6, 7, 2, 6, 8, 2, 6, 8, 2, 2
77	Sheen	Di awal	3	0	6, 6, 8, 2, 6, 8, 2, 7, 3, 6
78	Sheen	Di tengah	3	0	6, 6, 4, 7, 1, 2, 8, 1, 6, 8
79	Sheen	Di akhir	3	0	6, 5, 7, 2, 6, 2, 6, 8, 1, 2
80	Sin	Terisolasi	0	0	2, 2, 8, 6, 2, 8, 6, 2, 7, 6
81	Sin	Di awal	0	0	6, 6, 8, 2, 6, 8, 1, 2, 3, 6
82	Sin	Di tengah	0	0	6, 6, 4, 7, 1, 2, 8, 1, 6, 8
83	Sin	Di akhir	0	0	6, 5, 7, 2, 6, 2, 6, 8, 1, 2
84	Tamarbuto	Terisolasi	2	0	5, 6, 8, 1, 3, 7, 6, 4, 2, 1
85	Tamarbuto	Di akhir	2	0	1, 2, 8, 7, 5, 8, 1, 4, 6, 6
86	Ta	Terisolasi	2	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
87	Ta	Di awal	2	0	6, 6, 6, 6, 6, 6, 6, 8, 8, 8
88	Ta	Di tengah	2	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8
89	Ta	Di akhir	2	0	6, 6, 5, 4, 4, 4, 4, 2, 6, 4
90	Tho	Terisolasi	0	0	6, 6, 3, 6, 8, 8, 6, 4, 1, 8
91	Tho	Di awal	0	0	6, 6, 4, 5, 8, 2, 6, 4, 1, 8
92	Tho	Di tengah	0	0	6, 6, 3, 6, 8, 2, 4, 4, 2, 8
93	Tho	Di akhir	0	0	6, 6, 3, 6, 8, 8, 6, 4, 1, 8
94	Tsa	Terisolasi	3	0	6, 6, 7, 8, 8, 8, 8, 1, 2, 2
95	Tsa	Di awal	3	0	6, 6, 6, 6, 6, 6, 8, 8, 8, 8
96	Tsa	Di tengah	3	0	6, 6, 6, 6, 4, 4, 8, 8, 8, 8

97	Tsa	Di akhir	3	0	6, 6, 5, 4, 4, 4, 4, 2, 6, 4
98	Waw	Terisolasi	0	0	4, 3, 2, 8, 6, 4, 8, 2, 4, 6
99	Waw	Di akhir	0	0	8, 2, 7, 5, 7, 4, 8, 2, 5, 6
100	Ya	Terisolasi	2	2	8, 7, 5, 6, 8, 8, 8, 8, 2, 2
101	Ya	Di awal	2	2	6, 6, 6, 6, 6, 6, 6, 8, 8, 8
102	Ya	Di tengah	2	2	6, 6, 6, 4, 4, 8, 1, 7, 8, 8
103	Ya	Di akhir	2	2	6, 5, 4, 4, 4, 2, 2, 4, 5, 4
104	Za	Terisolasi	1	0	5, 6, 6, 6, 6, 6, 7, 8, 8, 8
105	Za	Di akhir	1	0	5, 6, 6, 4, 8, 8, 6, 7, 8, 8

### A.3 Hasil Ekstraksi Fitur dengan Font Times New Roman

No	Huruf	Posisi	Fitur		
			Jumlah Titik	Posisi Titik	Chain code Ter-Normalisasi
1	Ain	Terisolasi	0	0	8, 5, 3, 6, 4, 4, 8, 1, 3, 8
2	Ain	Di awal	0	0	8, 8, 6, 6, 4, 4, 7, 8, 8, 8
3	Ain	Di tengah	0	0	8, 8, 4, 4, 6, 5, 8, 1, 7, 8
4	Ain	Di akhir	0	0	4, 5, 4, 6, 4, 8, 1, 3, 8, 8
5	Alif	Terisolasi	0	0	6, 6, 6, 6, 6, 6, 6, 6, 6, 6
6	Alif	Di akhir	0	0	6, 6, 6, 6, 6, 6, 6, 6, 4, 4
7	Ba	Terisolasi	1	2	6, 6, 5, 4, 4, 4, 4, 4, 2, 2

8	Ba	Di awal	1	2	6, 6, 6, 6, 6, 6, 8, 8, 8, 8
9	Ba	Di tengah	1	2	6, 6, 6, 6, 6, 6, 8, 8, 8, 8
10	Ba	Di akhir	1	2	6, 5, 4, 4, 4, 4, 2, 2, 6, 4
11	Dal	Terisolasi	0	0	5, 5, 6, 6, 8, 8, 8, 8, 1, 2
12	Dal	Di akhir	0	0	5, 5, 6, 6, 4, 8, 8, 8, 8, 2
13	Dhad	Terisolasi	1	0	6, 4, 6, 8, 4, 2, 7, 7, 1, 2
14	Dhad	Di awal	1	0	6, 4, 3, 8, 8, 4, 4, 8, 8, 8
15	Dhad	Di tengah	1	0	6, 4, 4, 4, 8, 4, 4, 1, 8, 8
16	Dhad	Di akhir	1	0	6, 4, 6, 8, 4, 8, 7, 6, 1, 2
17	Dzal	Terisolasi	1	0	5, 5, 6, 6, 8, 8, 8, 8, 1, 2
18	Dzal	Di akhir	1	0	5, 5, 6, 6, 8, 8, 8, 8, 1, 2
19	Dzo	Terisolasi	1	0	6, 6, 4, 8, 8, 8, 7, 4, 2, 8
20	Dzo	Di awal	1	0	6, 6, 4, 6, 8, 8, 4, 4, 1, 8
21	Dzo	Di tengah	1	0	6, 6, 4, 4, 8, 8, 4, 4, 1, 8
22	Dzo	Di akhir	1	0	6, 6, 4, 8, 8, 8, 7, 4, 2, 8
23	Fa	Terisolasi	1	0	6, 5, 4, 4, 4, 1, 4, 2, 7, 5
24	Fa	Di awal	1	0	4, 4, 2, 2, 8, 5, 4, 1, 4, 6
25	Fa	Di tengah	1	0	4, 4, 2, 1, 6, 4, 1, 4, 6, 4
26	Fa	Di akhir	1	0	6, 5, 4, 4, 4, 2, 6, 2, 6, 4
27	Ghoin	Terisolasi	1	0	8, 5, 3, 6, 4, 4, 8, 1, 3, 8
28	Ghoin	Di awal	1	0	8, 8, 6, 6, 4, 4, 7, 8, 8, 8

29	Ghoin	Di tengah	1	0	8, 8, 4, 6, 5, 4, 8, 8, 1, 8
30	Ghoin	Di akhir	1	0	4, 5, 4, 6, 4, 8, 1, 3, 8, 8
31	Habesar	Terisolasi	0	0	6, 5, 7, 8, 2, 7, 5, 4, 2, 8
32	Habesar	Di awal	0	0	6, 5, 8, 3, 3, 4, 6, 5, 2, 1
33	Habesar	Di tengah	0	0	8, 2, 7, 6, 3, 5, 8, 2, 3, 5
34	Habesar	Di akhir	0	0	6, 5, 6, 4, 8, 7, 4, 8, 2, 1
35	Hamzah	Terisolasi	0	0	8, 8, 7, 5, 4, 4, 6, 2, 8, 8
36	Ha	Terisolasi	0	0	8, 8, 7, 6, 4, 8, 8, 2, 3, 4
37	Ha	Di awal	0	0	4, 4, 5, 4, 8, 8, 8, 8, 8, 8
38	Ha	Di tengah	0	0	4, 5, 4, 4, 8, 8, 8, 8, 8, 8
39	Ha	Di akhir	0	0	8, 8, 6, 4, 4, 8, 2, 4, 6, 4
40	Jim	Terisolasi	1	1	8, 8, 7, 6, 4, 8, 8, 2, 3, 4
41	Jim	Di awal	1	1	4, 4, 5, 4, 8, 8, 8, 8, 8, 8
42	Jim	Di tengah	1	1	4, 4, 6, 4, 8, 8, 8, 8, 8, 8
43	Jim	Di akhir	1	1	8, 8, 6, 4, 4, 8, 2, 4, 6, 4
44	Kaf	Terisolasi	1	0	6, 6, 6, 6, 8, 8, 8, 8, 2, 2
45	Kaf	Di awal	1	0	8, 7, 6, 5, 5, 5, 8, 8, 8, 8
46	Kaf	Di tengah	1	0	8, 7, 6, 4, 5, 6, 8, 8, 8, 8
47	Kaf	Di akhir	1	0	6, 6, 6, 6, 8, 8, 8, 8, 2, 2
48	Kha	Terisolasi	1	0	8, 8, 7, 6, 4, 8, 8, 2, 3, 4
49	Kha	Di awal	1	0	4, 4, 5, 4, 8, 8, 8, 8, 8, 8

50	Kha	Di tengah	1	0	4, 4, 6, 4, 8, 8, 8, 8, 8, 8
51	Kha	Di akhir	1	0	8, 8, 6, 4, 4, 8, 2, 4, 6, 4
52	Lamalif	Terisolasi	0	0	6, 6, 7, 1, 6, 2, 7, 2, 5, 5
53	Lamalif	Di akhir	0	0	6, 6, 6, 6, 5, 2, 7, 7, 8, 8
54	Lam	Terisolasi	0	0	6, 6, 6, 6, 6, 8, 8, 1, 2, 2
55	Lam	Di awal	0	0	6, 6, 6, 6, 6, 6, 6, 6, 8, 8
56	Lam	Di tengah	0	0	6, 6, 6, 6, 6, 6, 6, 4, 8, 8
57	Lam	Di akhir	0	0	6, 6, 6, 6, 4, 7, 8, 1, 2, 2
58	Mim	Terisolasi	0	0	4, 5, 6, 8, 8, 7, 6, 6, 6, 6
59	Mim	Di awal	0	0	4, 3, 3, 5, 6, 8, 2, 1, 7, 6
60	Mim	Di tengah	0	0	4, 2, 3, 6, 4, 8, 8, 2, 7, 6
61	Mim	Di akhir	0	0	4, 5, 4, 4, 8, 8, 8, 6, 6, 6
62	Nun	Terisolasi	1	0	6, 6, 6, 7, 8, 8, 8, 1, 2, 2
63	Nun	Di awal	1	0	6, 6, 6, 6, 6, 8, 8, 8, 8, 8
64	Nun	Di tengah	1	0	6, 6, 6, 6, 6, 4, 8, 8, 8, 8
65	Nun	Di akhir	1	0	6, 6, 4, 6, 7, 8, 8, 1, 2, 2
66	Qaf	Terisolasi	2	0	6, 6, 4, 4, 2, 2, 8, 8, 4, 6
67	Qaf	Di awal	2	0	4, 4, 2, 2, 8, 5, 4, 1, 4, 6
68	Qaf	Di tengah	2	0	4, 4, 2, 1, 6, 4, 1, 4, 6, 4
69	Qaf	Di akhir	2	0	6, 6, 4, 4, 2, 2, 5, 8, 5, 4
70	Ra	Terisolasi	0	0	6, 6, 6, 6, 7, 7, 7, 8, 8, 8

71	Ra	Di akhir	0	0	6, 6, 6, 4, 7, 7, 7, 8, 8, 8
72	Sad	Terisolasi	0	0	6, 4, 6, 8, 4, 2, 7, 7, 1, 2
73	Sad	Di awal	0	0	6, 4, 3, 8, 8, 4, 4, 8, 8, 8
74	Sad	Di tengah	0	0	6, 4, 4, 4, 8, 4, 4, 1, 8, 8
75	Sad	Di akhir	0	0	6, 4, 6, 8, 4, 8, 7, 6, 8, 2
76	Sheen	Terisolasi	3	0	6, 5, 2, 2, 6, 6, 6, 8, 2, 2
77	Sheen	Di awal	3	0	6, 6, 8, 2, 6, 8, 8, 2, 6, 8
78	Sheen	Di tengah	3	0	6, 6, 8, 2, 6, 7, 8, 2, 6, 8
79	Sheen	Di akhir	3	0	6, 4, 2, 2, 6, 6, 7, 8, 1, 2
80	Sin	Terisolasi	0	0	2, 2, 8, 6, 6, 6, 2, 2, 5, 6
81	Sin	Di awal	0	0	6, 6, 8, 2, 6, 8, 8, 2, 6, 8
82	Sin	Di tengah	0	0	6, 6, 8, 2, 6, 7, 8, 2, 6, 8
83	Sin	Di akhir	0	0	6, 4, 2, 2, 6, 6, 7, 8, 1, 2
84	Tamarbuto	Terisolasi	2	0	6, 5, 6, 8, 8, 6, 4, 3, 2, 8
85	Tamarbuto	Di akhir	2	0	6, 5, 6, 4, 8, 3, 4, 8, 2, 1
86	Ta	Terisolasi	2	0	6, 6, 5, 4, 4, 4, 4, 4, 2, 2
87	Ta	Di awal	2	0	6, 6, 6, 6, 6, 8, 8, 8, 8, 8
88	Ta	Di tengah	2	0	6, 6, 6, 6, 4, 8, 8, 8, 8, 8
89	Ta	Di akhir	2	0	6, 5, 4, 4, 4, 4, 2, 2, 6, 4
90	Tho	Terisolasi	0	0	6, 6, 4, 8, 8, 8, 7, 4, 2, 8
91	Tho	Di awal	0	0	6, 6, 4, 6, 8, 8, 4, 4, 1, 8

92	Tho	Di tengah	0	0	6, 6, 4, 6, 8, 8, 4, 4, 1, 8
93	Tho	Di akhir	0	0	6, 6, 4, 8, 8, 8, 7, 4, 2, 8
94	Tsa	Terisolasi	3	0	6, 6, 5, 4, 4, 4, 4, 4, 2, 2
95	Tsa	Di awal	3	0	6, 6, 6, 6, 6, 6, 8, 8, 8, 8
96	Tsa	Di tengah	3	0	6, 6, 6, 6, 6, 8, 8, 8, 8, 8
97	Tsa	Di akhir	3	0	6, 5, 4, 4, 4, 4, 2, 2, 6, 4
98	Waw	Terisolasi	0	0	4, 4, 3, 2, 1, 6, 4, 1, 4, 6
99	Waw	Di akhir	0	0	8, 1, 5, 6, 8, 4, 3, 8, 3, 6
100	Ya	Terisolasi	2	2	1, 7, 6, 4, 7, 8, 8, 1, 2, 2
101	Ya	Di awal	2	2	6, 6, 6, 6, 6, 8, 8, 8, 8, 8
102	Ya	Di tengah	2	2	6, 6, 6, 6, 6, 8, 8, 8, 8, 8
103	Ya	Di akhir	2	2	6, 5, 4, 4, 4, 2, 8, 4, 4, 4
104	Za	Terisolasi	1	0	6, 6, 6, 6, 7, 7, 7, 8, 8, 8
105	Za	Di akhir	1	0	6, 6, 6, 5, 7, 7, 7, 8, 8, 8