data	n	encoded text
0	1	[s1]
1	1	[s2]
00	2	[s1, s3]
01	2	[s1, s4]
10	2	[s2, s4]
11	2	[s2, s5]
000	3	[s1, s3]
001	3	[s1, s4, s6]
010	3	[s1, s4, s7, start, s1]
011	3	[s1, s4, s7, start, s2]
100	3	[s2, s4]
101	3	[s2, s5, s7]
110	3	[s2, s5, s8, start, s1]
111	3	[s2, s5, s8, start, s2]
0000	4	[s1, s3, start, s1]
0001	4	[s1, s3, start, s2]
0010	4	[s1, s4, s6, start, s1]
0011	4	[s1, s4, s6, start, s2]
0100	4	[s1, s4, s7, start, s1, s3]
0101	4	[s1, s4, s7, start, s1, s4]
0110	4	[s1, s4, s7, start, s2, s4]
0111	4	[s1, s4, s7, start, s2, s5]
1000	4	[s2, s4, s6]
1001	4	[s2, s4, s7]
1010	4	[s2, s5, s7]
1011	4	[s2, s5, s8, start, s1, s3]
1100	4	[s2, s5, s8, start, s1, s4, s6]
1101	4	[s2, s5, s8, start, s1, s4, s7]
1110	4	[s2, s5, s8, start, s2, s4]
1111	4	[s2, s5, s8, start, s2, s5]
00000	5	[s1, s3, start, s1, s3]
11111	5	[s2, s5, s8, start, s2, s5, s8, start, s2]