S4 S3 S2 S1 S0	go	getInput	word_eqInput	found	word_eq0	isFound_i	try_lt10	i_lt8	N4 N3 N2 N1 N0
00000	0	-	-	-	-	-	-	-	00000
	1								00001
00001	-	-	-	-	-	-	-	-	00010
00010	-	-	-	-	-	-	-	-	11101
00011	-	-	-	-	-	-	-	-	00100
00100	-	-	-	-	-	-	-	-	11101
00101	-	-	-	-	-	-	-	-	00110
00110	-	-	-	-	-	-	0	-	11000
							1		00111
00111	-	-	-	-	-	0	-	0	01011
						0		1	01000
						1		0	01011
						1		1	01010
01000	-	-	-	-	-	-	-	-	01001
01001	-	-	-	-	-	-	-	-	00111
01010	-	-	-	-	-	-	-	-	01001
01011		0							01011
		1							01100
01100	-	-	-	-	-	-	-	-	01101
01101			-	0		-		0	10000
			-	1		-		0	10001
			0	-		0		1	01111
			0	-		1		1	01111
			1	-		0		1	01110
			1	-		1		1	01111
01110	-	-	-	-	-	-	-	-	01111
01111	-	-	-	-	-	-	-	-	01101
10000	-	-	-	-	-	-	-	-	10001
10001	-	-	-	-	-	-	-	-	10010
10010	-	-	-	-	-	-	-	-	10011
10011	-	-	-	-	-	0	-	0	10110
						0		1	10100
						1		0	10110
						1		1	10101
10100	-	-	-	-	-	-	-	-	10101
10101	-	-	-	-	-	-	-	-	10011
10110	-	-	-	0	-	-	-	-	00110
4044				1					10111
10111	-	-	-	-	-	-	-	-	11001
11000	-	-	-	-	-	-	-	-	11001
11001	-	-	-	-	-	-	-	-	11010

11010	-	-	-	-	-	-	-	0	00000
								1	11011
11011	-	-	-	-	-	-	-	-	11100
11100	-	-	-	-	-	-	-	-	11001
11101					0			0	00101
					1			0	00101
					0			1	00101
					1			1	00011

N0 = s4's3's2's1's0'go + s4's3's2's1s0' + s4's3's2s1s0'try_lt10 + s4's3's2s1s0i_lt8' + s4's3s2's1' + s4's3s2's1s0' + s4's3s2's1s0getInput' + s4's3s2s1's0' + s4's3s2s1's0(found*i_lt8' + i_lt8 *(word_eqInput' + isFound_i)) + s4's3s2s1 + s4s3's2's1's0' + s4s3's2's1s0' + s4s3's2's1s0isFound_i * i_lt8 + s4s3's2s1' + s4s3's2s1s0'found + s4s3's2s1s0 + s4s3s2's1's0' + s4s3s2's1s0'i_lt8 + s4s3s2s1's0'

N1 = s4's3's2's1's0 + s4's3's2's1s0'word_eq0 * i_lt8 + s4's3's2s1' + s4's3's2s1s0'try_lt10 + s4's3's2s1s0(isFound_i' * i_lt8)' + s4's3s2's1's0 + s4's3s2's1s0getInput' +s4's3s2s1's0i_lt8' + s4's3s2s1s0' +s4s3's2'(s1 xor s0) + s4s3's2's1s0i_lt8' + s4s3's2(s1 xor s0) + s4s3s2's1's0 + s4s3s2's1s0'i_lt8

N2 = s4's3's2's1s0' (word_eq0' + it_lt8) + s4's3's2's1s0 + s4's3's2s1's0 + s4's3's2s1s0'try_lt10 + s4's3s2's1's0 + s4's3s2's1s0getInput + s4's3s2s1's0' + s4's3s2s1's0i_lt8 + s4's3s2s1s0' + s4's3s2s1s0 + s4s3's2's1s0 + s4s3's2s1's0' + s4s3's2s1s0' + s4s3's2s1s0'

N3 = s4's3's2s1s0'try_lt10' + s4's3's2s1s0 + s4's3s2's0' + s4's3s2's1s0 + s4's3s2s1's0' + s4's3s2s1's0i lt8 + s4's3s2s1 + s4s3's2s1s0 + s4s3s2's1' + s4s3s2's1 + s4s3s2s1's0'

N4 = s4's3's2s1s0'try_lt10' + s4's3s2s1's0i_lt8' + s4s3's2' + s4s3's2s1' + s4s3's2s1s0'found + s4s3's2s1s0 + s4s3s2's1' + s4s3s2's1s0' i lt8 + s4s3s2's1s0 + s4s3s2s1's0'