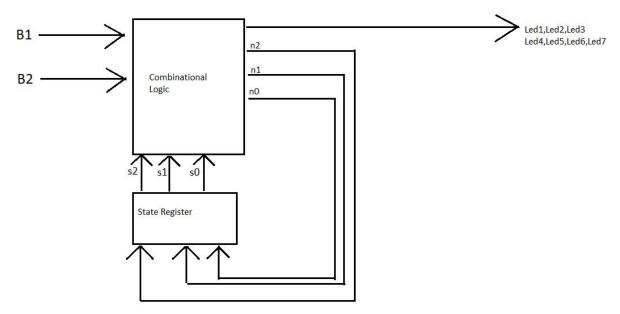


FSM CONTROLLER

Inputs: s2,s1,s0,B1,B2

Outputs:n2,n1,n0,Led1,Led2,Led3,Led4,Led5,Led6,Led7



TRUTH TABLE

INPUTS					OUTPUTS									
S2	S1	S0	B1	B2	N2	N1	N0	L1	L2	L3	L4	L5	L6	L7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
0	0	0	1	0	0	0	1	0	0	1	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
0	0	1	0	0	0	0	1	0	0	1	0	0	0	0
0	0	1	0	1	0	0	0	0	0	0	1	0	0	0
0	0	1	1	0	0	1	1	0	1	0	0	0	0	0
0	0	1	1	1	0	0	1	0	0	1	0	0	0	0
0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
0	1	0	0	1	1	0	0	0	0	0	0	1	0	0
0	1	0	1	0	0	0	0	0	0	0	1	0	0	0
0	1	0	1	1	0	1	0	0	0	0	0	1	0	0
0	1	1	0	0	0	1	1	0	1	0	0	0	0	0
0	1	1	0	1	0	0	1	0	0	1	0	0	0	0
0	1	1	1	0	1	0	1	1	0	0	0	0	0	0
0	1	1	1	1	0	1	1	0	1	0	0	0	0	0
1	0	0	0	0	1	0	0	0	0	0	0	0	1	0

1	0	0	0	1	1	1	0	0	0	0	0	0	0	1
1	0	0	1	0	0	1	0	0	0	0	0	1	0	0
1	0	0	1	1	1	0	0	0	0	0	0	0	1	0
1	0	1	0	0	1	0	1	1	0	0	0	0	0	0
1	0	1	0	1	0	1	1	0	1	0	0	0	0	0
1	0	1	1	0	1	1	1	0	0	0	0	0	0	0
1	0	1	1	1	1	0	1	1	0	0	0	0	0	0
1	1	0	0	0	1	1	0	0	0	0	0	0	0	1
1	1	0	0	1	1	1	1	0	0	0	0	0	0	0
1	1	0	1	0	1	0	0	0	0	0	0	0	1	0
1	1	0	1	1	1	1	0	0	0	0	0	0	0	1

Boolean Expressions:

```
n2: s2s0'B1' + s2B1'B2' + s2B1B2 + s2s1s0' + s1s0'B1'B2 + s2's1s0B1B2'
```

n1:s1B1'B2' + s1B1B2 + s2s0'B2 + s1's0'B1'B2 + s1's0B1B2' + s2s1'B1'B2

n0:s0B1'B2' + s0B1B2 + s2's1s0 + s2s1's0 + s2's1'B1B2' + s2s1s0'B1'B2

Led 1: s2's1s0B1B2' + s2s1's0B1'B2' + s2s1's0B1B2

Led 2: s2's1's0B1B2' + s2's1s0B1'B2' + s2's1s0B1B2 + s2s1's0B1'B2

Led 3: s2's1's0'B1B2' + s2's1's0B1'B2' + s2's1's0B1B2 + s2's1s0B1'B2

Led 4: s2's1's0'B1'B2' + s2's1's0'B1B2 + s2's1's0B1'B2 + s2's1s0'B1B2' +

s2s1s0B1'B2 + s2s1s0B1B2'

Led 5: s2's0'B1'B2 + s2's1s0'B1' + s2's1s0'B2 + s2s1's0'B1B2'

Led 6: s2s1's0'B1'B2' + s2s1's0'B1B2 + s2s1s0'B1B2'

Led 7: s2s1's0'B1'B2 + s2s1s0'B1'B2' + s2s1s0'B1B2

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