Prelab8

Thursday, October 7, 2021 9:06 PM

Your next-state function, reset value and lookup table values

Just as with lab 5, you will implement a unique next-state block, reset value, and output logic for your design. Your next-state table is as follows:

q	next_q
0	1
1	4
2	7
3	6
4	3
5	2
6	5
7	0

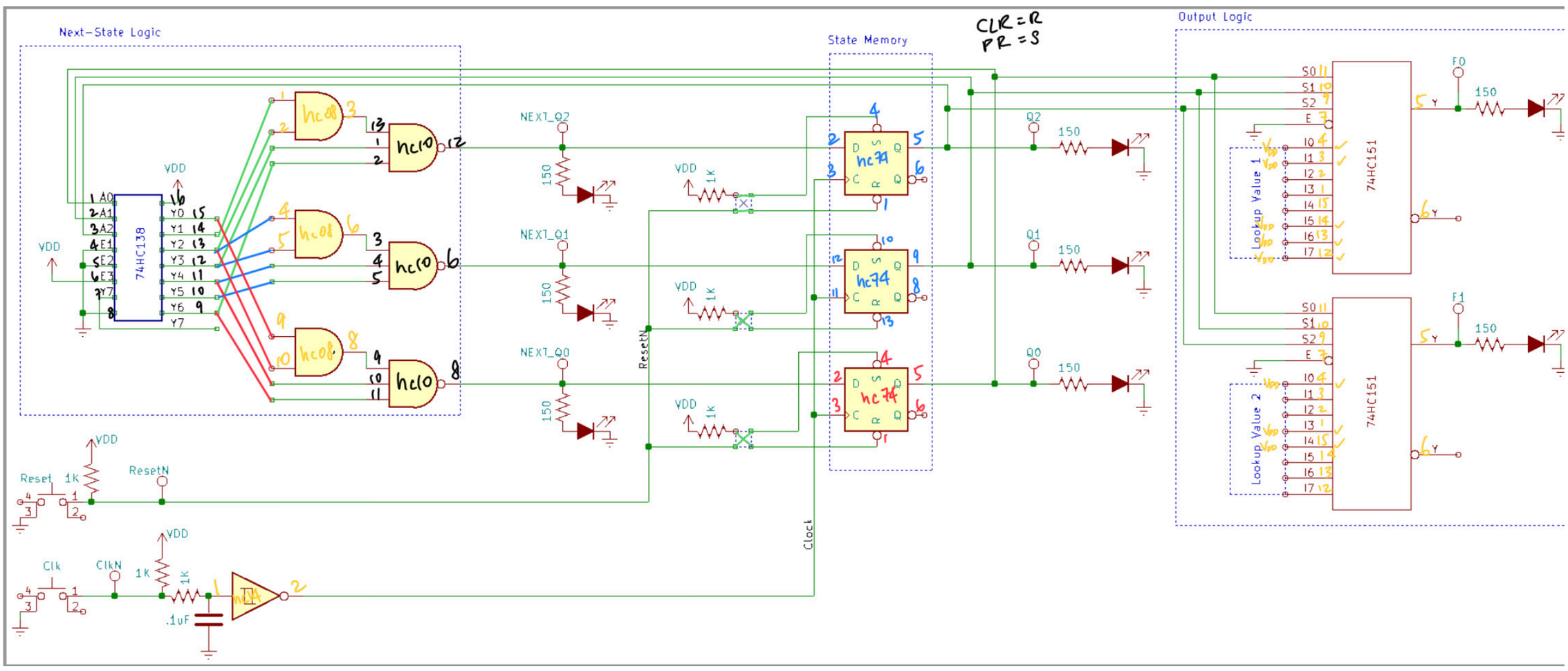
Your reset value is 3.

Your first lookup table expression is X·Y·Z + X·Y·Z' + X·Y'·Z + X'·Y'·Z + X'·Y'·Z'.

Your second lookup table expression is X·Y'·Z' + X'·Y·Z + X'·Y'·Z'.

```
assign next_q[0] = ~(p[4]&p[6]&p[2]&p[5])
assign next_q[1] = ~(p[4]&p[3]&p[5]&p[2])
assign next_q[2] = ~(p[3]&p[6]&p[2]&p[1])
```

2 1 0
0 1 1 & look at the "1"s
1 1 0
1 0 1
0 1 0
1 1 1
0 0 0
0 0 1
1 0 0



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