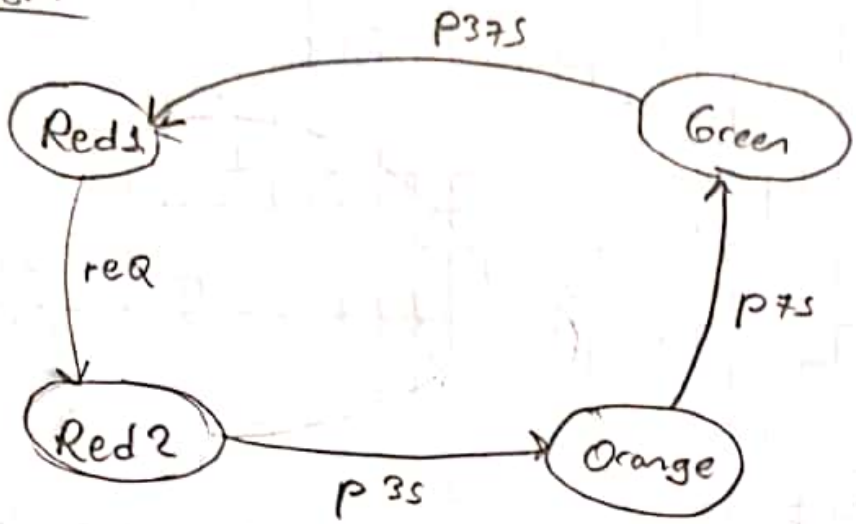
CSE 284 Lab 5

* inputs = req, p3s, p7s, p375
* outputs = resetT, redL, orangeL, greenL

1-) FSM



* 4 states = 2 bit register (s1, s0) + 4 inputs
* 2 bit register for the next state (n1, n0) + 4 outputs

3-)

s1	s0	
0	0	→ Red1
0	1	→ Red2
1	0	→ Orange
1	1	→ Green

4-)

		A	B	C	D						
s1	s0	req	p3s	p7s	p375	n1	n0	resetT	redL	orgL	greenL
0	0	1	x	x	x	0	1	1	1	0	0
0	1	x	1	x	x	1	0	0	0	1	0
1	0	x	x	1	x	1	1	0	0	0	1
1	1	x	x	x	1	0	0	1	1	0	0

* resetT = $S_1'S_0'$ + S_1S_0 D
* redL = $S_1'S_0'$A + S_1S_0D
* orgL = $S_1'S_0$B
* greenL = S_1S_0'C
* n_1 = $S_1'S_0$B + S_1S_0'C
* n_0 = $S_1'S_0'$A + S_1S_0'C