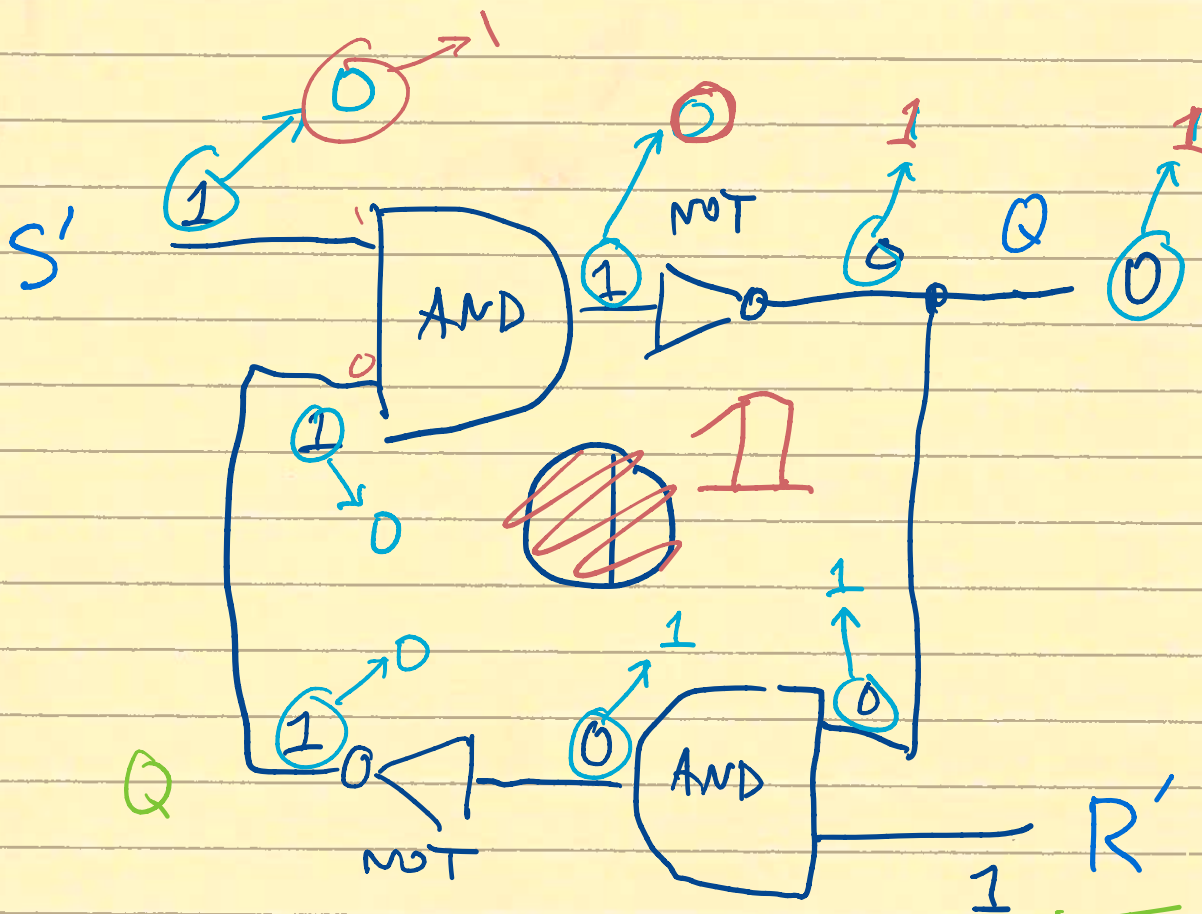


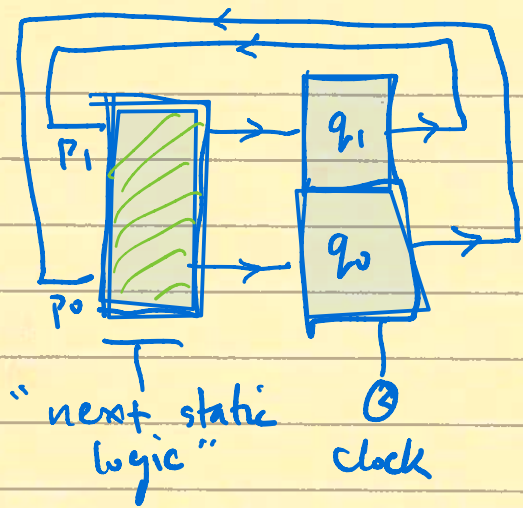
propagation delay



$S', R' = 1, Q = 0$

set $S' := 0$... Q changed to 1
 set $S' := 1$... Q stays at 1

Changes to 0
 back to 1



e.g. sequential circuit

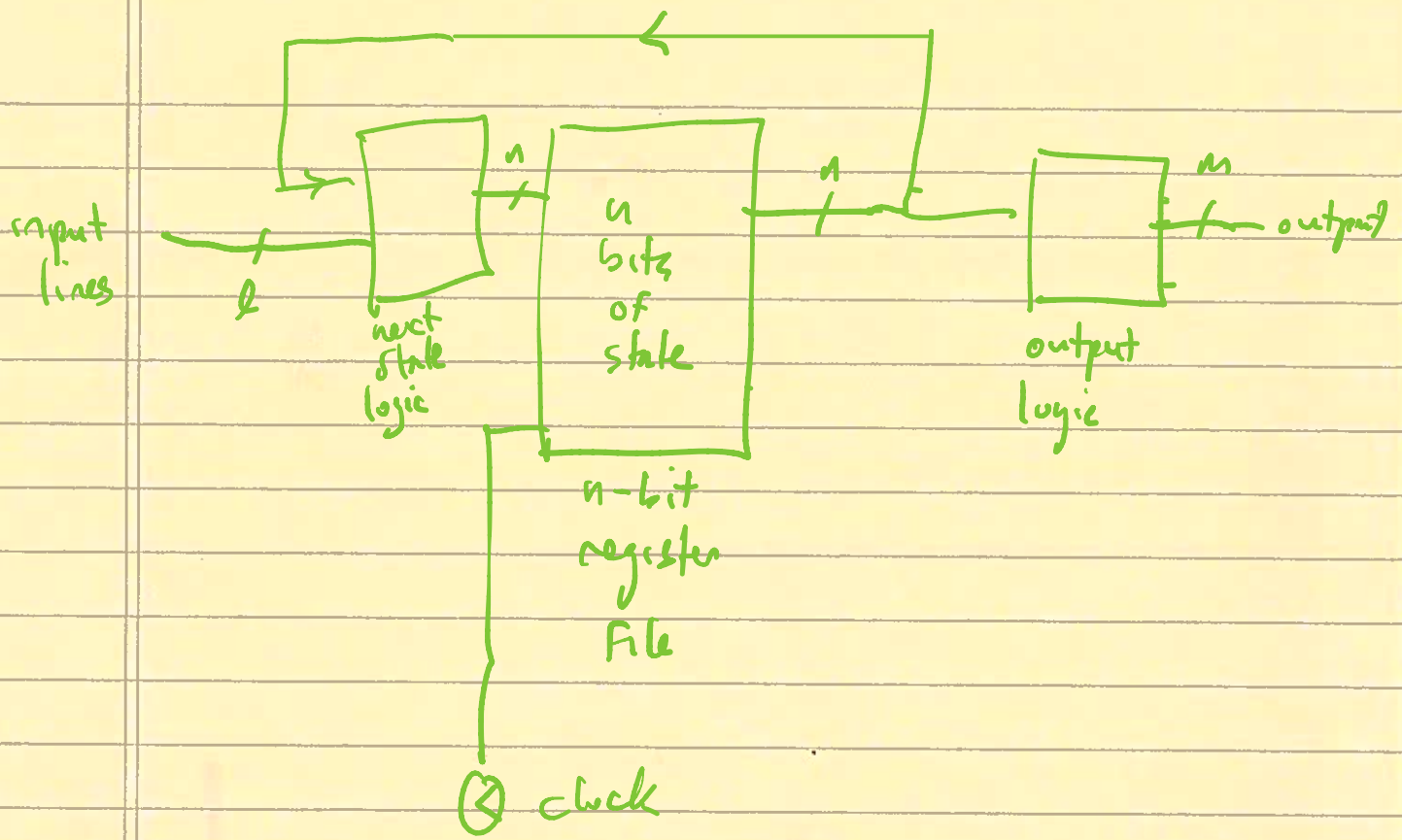
"previous state" "next state"

p_1	p_0	q_1	q_0
0	0	0	1
0	1	1	0
1	0	1	1
1	1	0	0

$$q_1 := p_1 \oplus p_0$$

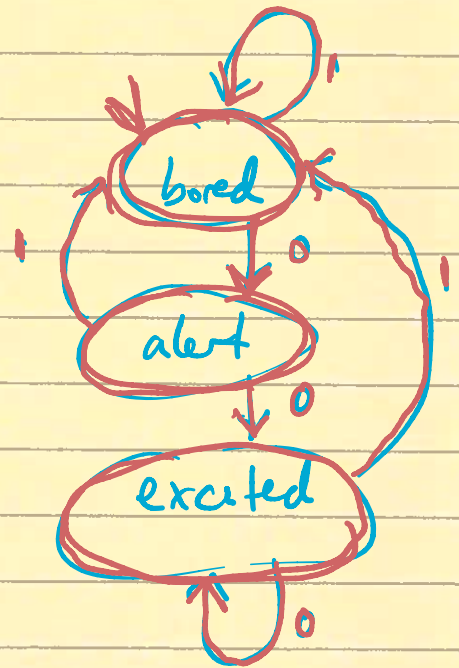
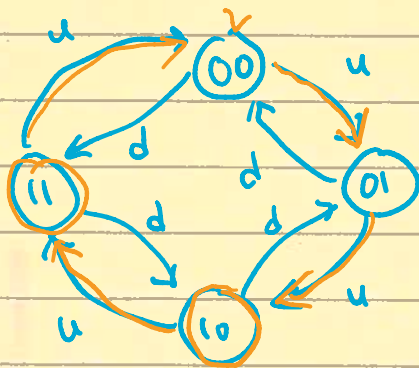
$$q_0 := \overline{p_0}$$

Two bits of state $q_1 : q_0$

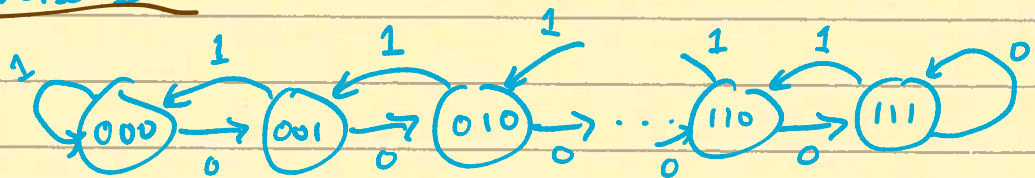


Just saw 00...

Two bit up/down counter

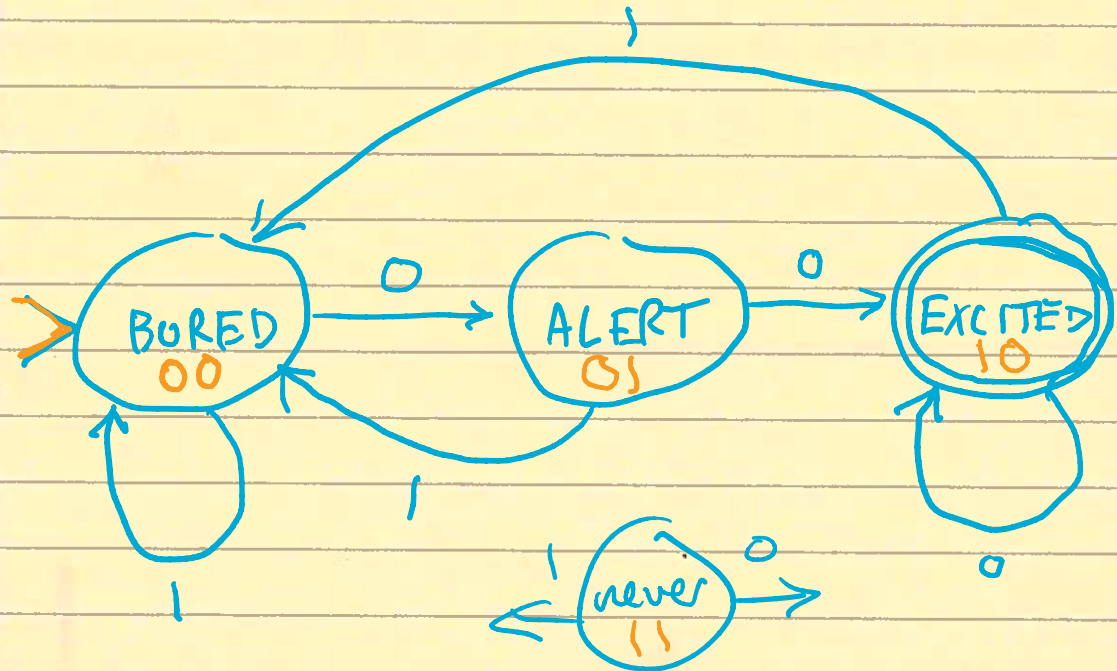


Exercise 1



Exercise 2

Devise your own



state	next bit	next state
B	0	A
B	1	B
A	0	E
A	1	B
E	0	E
E	1	B

00	0	01
00	1	00
01	0	10
01	1	00
10	0	10
10	1	00
11	0	XX
11	1	XX

X - "don't care"