Jalen Powell
Elec 2200

11/12/2021

HW 26

1.) $D_1 = Q_0(x + Q_1) = Q_0x + Q_0Q_1$

$D_0 = x$

$Z = \bar{x} Q_1 \bar{Q}_0$

a.) This is a Mealy style machine

b.)

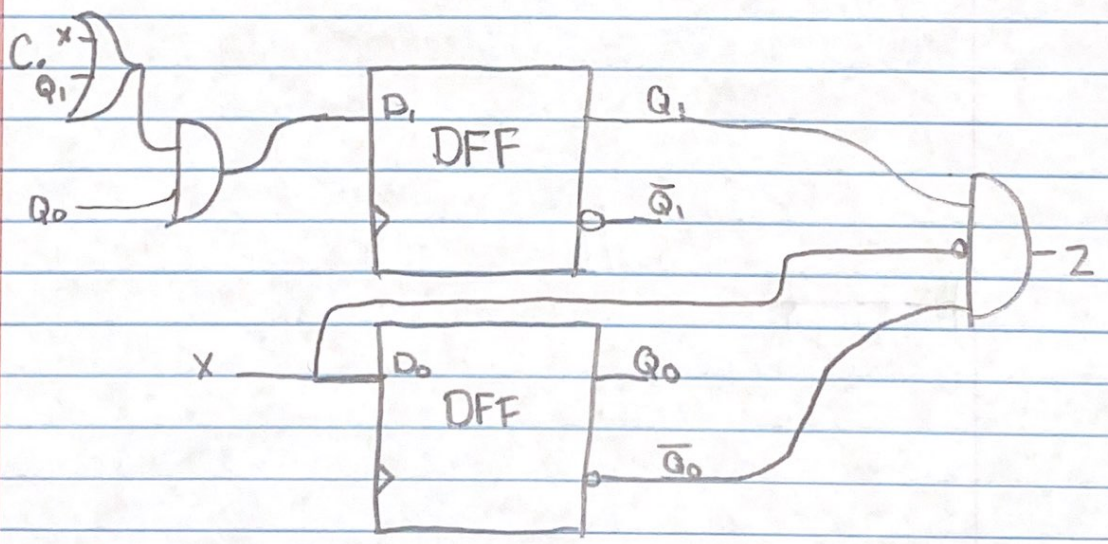
Q_1Q_0 \ x	0	1	D_1
00	0	0	
01	0	1	
11	1	1	
10	0	0	

Q_1Q_0 \ x	0	1	D_0
00	0	1	
01	0	1	
11	0	1	
10	0	1	

Q_1Q_0 \ x	0	1	z
00	0	0	
01	0	0	
11	0	0	
10	1	0	

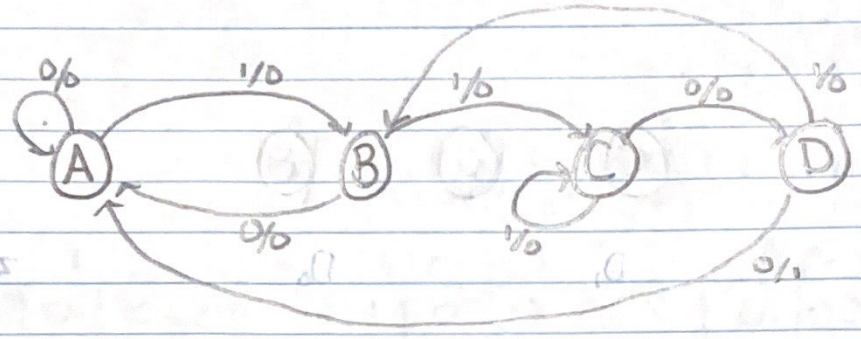
Q_1Q_0 \ x	0	1
00	00/0	01/0
01	00/0	11/0
11	10/0	11/0
10	00/1	01/0

State	0	1
A	A/0	B/0
B	A/0	C/0
C	D/0	C/0
D	A/1	B/0



D.

State	0	1
A	A/0	B/0
B	A/0	C/0
C	D/0	C/0
D	A/1	B/0



Sequence detected : 1100