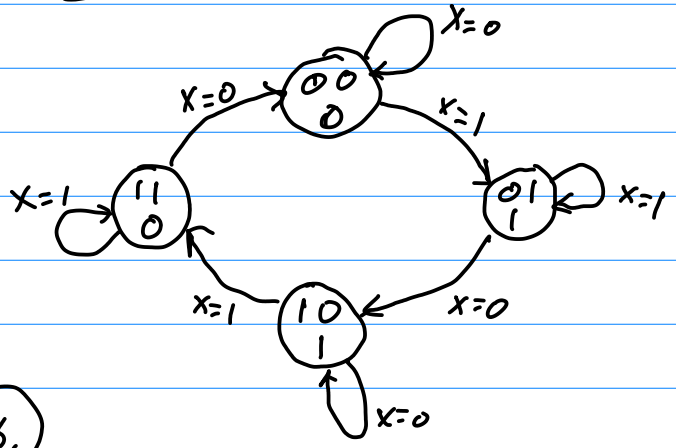
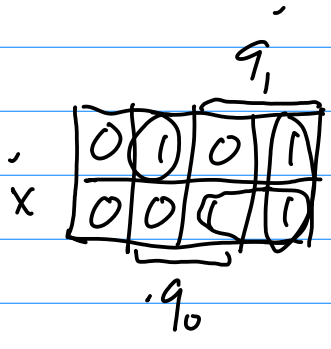
Eg.

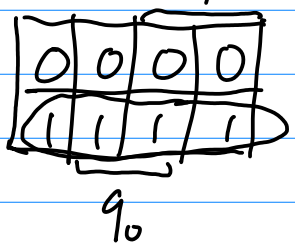
Moore - Four states, one input: Each time the input changes, we advance to the next state; Output a 1 iff we are in state 1 or 2.

State graph



PS $q_1 q_0$	NS. $X=0$	$X=1$	Z
00	00	01	0
01	10	01	1
10	10	11	1
11	00	11	0



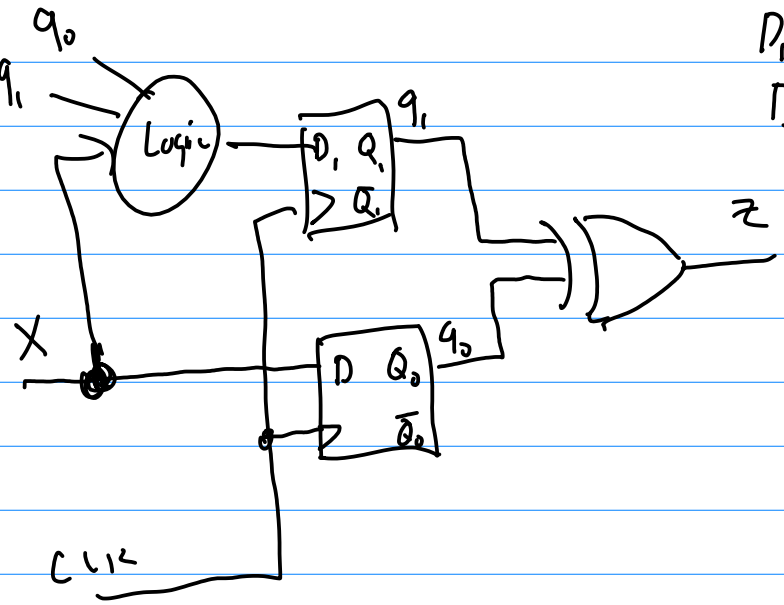


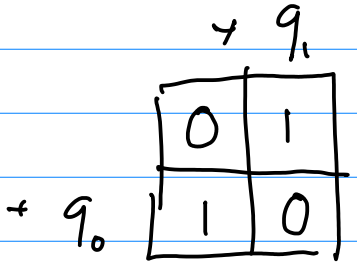
$D_1 = q_1^+$

$D_1 = \ldots$

$D_0 = q_0^+$

$D_0 = X$





Z

$z = q_1 \oplus q_0$

JK-ff

J K	Q^+
0 0	Q
0 1	0
1 0	1
1 1	$\bar{Q}$

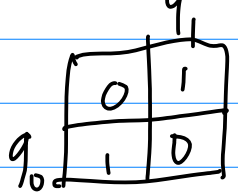
⇒

PS: J K Q	NS: Q^+
0 0 0	0
0 0 1	1
0 1 0	0
0 1 1	0
1 0 0	1
1 0 1	1
1 1 0	1
1 1 1	0

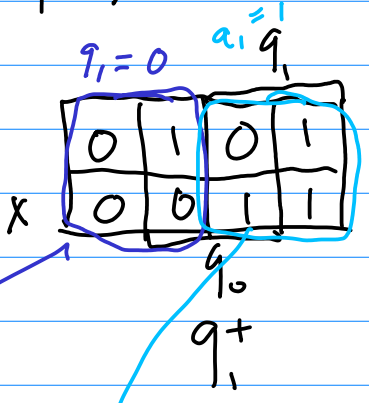
Q Q^+	J K
0 0	0 X
0 1	1 X
1 0	X 1
1 1	X 0

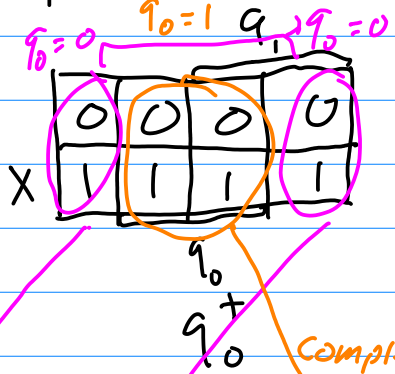
PS: q_1 q_0	NS: q_1^+ q_0^+ X=0	X=1	Z	X=0: J_1 K_1	X=0: J_0 K_0	X=1: J_1 K_1	X=1: J_0 K_0
0 0	0 0	0 1	0	0 X	0 X	0 X	1 X
0 1	1 0	0 1	1	1 X	X 1	0 X	X 0
1 0	1 0	1 1	1	X 0	0 X	X 0	1 X
1 1	0 0	1 1	0	X 1	X 1	X 0	X 0

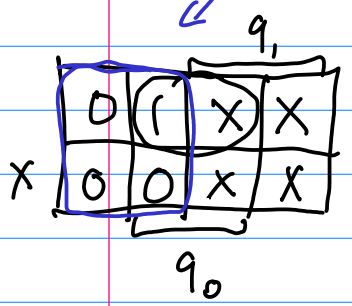
output

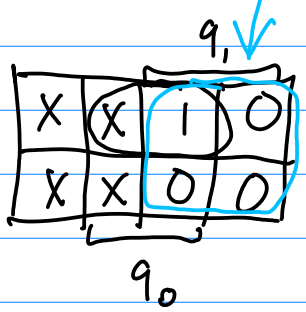


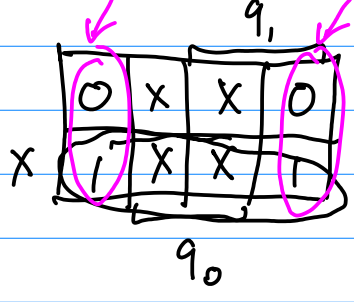
$z = q_1 \oplus q_0$

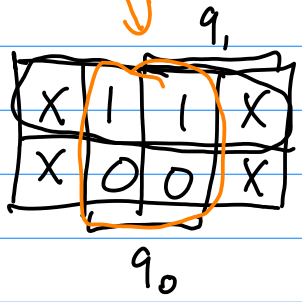












J_1 $J_1 = q_0 \bar{X}$

K_1 $K_1 = q_0 \bar{X}$

J_0 $J_0 = X$

K_0 $K_0 = \bar{X}$

$J_1 = q_0 \bar{x}$ $K_1 = q_0 \bar{x}$ $J_0 = x$ $K_0 = \bar{x}$