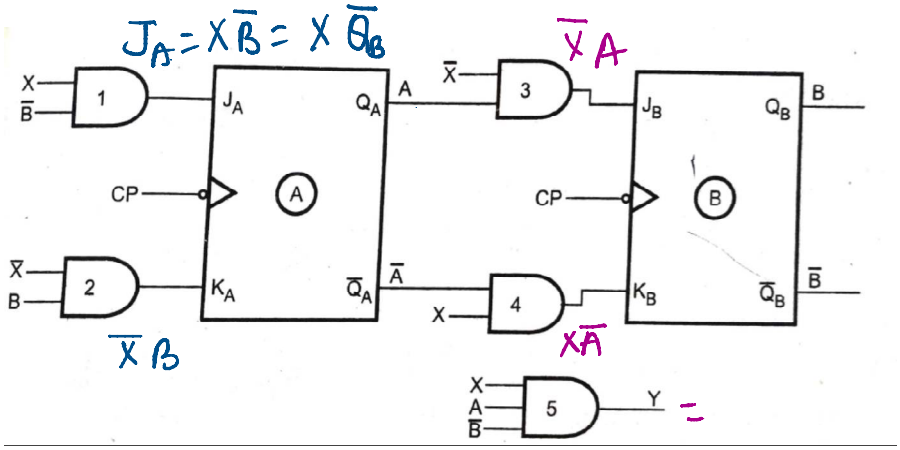
Mealy Machine



$Q_A = A$

$\bar{Q}_A = \bar{A}$

$Q_B = B$

$\bar{Q}_B = \bar{B}$

PS
00
01
10
11

Present state AB = 00, i/p x = 0

PS Q_A Q_B	$J_A = X\bar{Q}_B$ $J_A = X\bar{B}$	$K_A = \bar{X}Q_B$ $K_A = \bar{X}B$	Q_{A+1} Next	$J_B = \bar{X}A$	$K_B = X\bar{A}$	Q_{B+1}	o/p Y $XA\bar{B}$
A B 0 0	$J_A = 0.1 = 0$ $J_A = 0$ ✓	$K_A = 1.0$ $K_A = 0$	0 ✓	$J_B = 1.0$ $= 0$	$K_B = 0.1$ $= 0$	0 ✓	$0.0.1 = 0$ $= 0$ ✓

J	K	Q	Q(t+1)
0	0	0	0

Present state AB = 00, i/p x = 1

PS Q_A Q_B A B	$J_A = X\bar{Q}_B$ $J_A = X\bar{B}$	$K_A = \bar{X}Q_B$ $K_A = \bar{X}B$	N.S for $J_A K_A$ Q_{A+1}	$J_B = \bar{X}Q_B$ $= \bar{X}A$	$K_B = XQ\bar{A}$ $K_B = X\bar{A}$	N.S for $J_B K_B$ Q_{B+1}	Y $XA\bar{B}$
0 0	1	0	1	0	1	0	0

J	K	Q	Q(t+1)
1	0	0	1

NS = 10

Present State	Next State		Output	
	X = 0	X = 1	X = 0	X = 1
AB	AB	AB	Y	Y
00	00	10	0	0
01	01	00	0	0
10	11	10	0	1
11	01	11	0	0