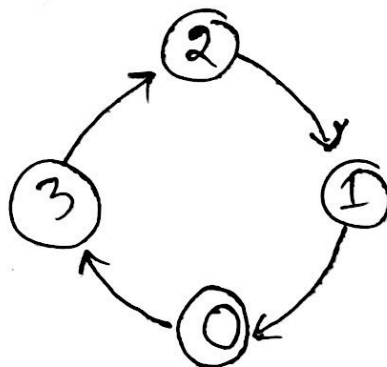


Name: SK. Sabit Bin Mosaddek

Student ID: S201805106

$S_1 = 2, 1, 0, 3, 2, 1, 0, 3, \dots$

State Diagram:



Excitation Table:

$y_1 y_0$	$Y_1 Y_0$	$J_1$	$K_1$	$J_0$	$K_0$
00	11	1	x	1	x
01	00	0	x	x	1
10	01	x	1	1	x
11	10	x	0	x	1

$J_1$ 

$\frac{Q_1}{Q_0}$	0	1
0	1	X
1	0	X

 $K_1$ 

$\frac{Q_1}{Q_0}$	0	1
0	X	1
1	X	0

 $J_0$ 

$\frac{Q_1}{Q_0}$	0	1
0	1	1
1	X	X

 $K_0$ 

$\frac{Q_1}{Q_0}$	0	1
0	X	X
1	1	1

$$J_1 = \bar{J}_0$$

$$K_1 = \bar{J}_0$$

$$J_0 = 1$$

$$K_0 = 1$$

