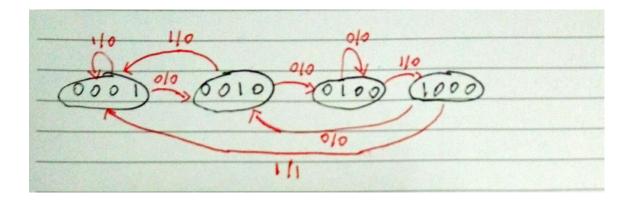
## **State Table**

Present State	Input	Next State	Output	Q1	Q2	Q3	Q4
0001	0	0010	0	0	0	1	0
0001	1	0001	0	0	0	0	1
0010	0	0100	0	0	1	0	0
0010	1	0001	0	0	0	0	1
0100	0	0100	0	0	1	0	0
0100	1	1000	0	1	0	0	0
1000	0	0010	0	0	0	1	0
1000	1	0001	1	0	0	0	1

## **State Diagram**



## **Circuit Design**

