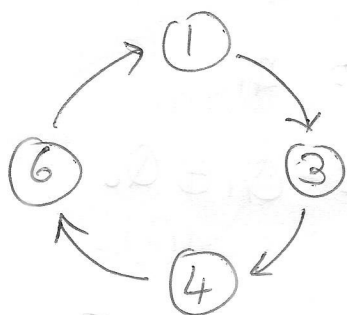


3 bit sequence generator using D FF



Q_1	Q^+	D
0	0	0
0	1	1
1	0	0
1	1	1

Q_2	Q_1	Q_0	Q_2^+	Q_1^+	Q_0^+	D_2	D_1	D_0
0	0	0						
0	0	1	0	1	1	0	1	1
0	1	0						
0	1	1	1	0	0	1	0	0
1	0	0	1	1	0	1	1	0
1	0	1						
1	1	0	0	0	1	0	0	1
1	1	1						

D_2

$Q_1 Q_0$	00	01	11	10
0	X	0	1	X
1	1	X	X	0

$$D_2 = Q_1' Q_0' + Q_1 Q_0 = (Q_1 \oplus Q_0)'$$

D_1

Q_1	Q_0	00	01	11	10
0	X	1	0	X	
1	1	X	X	0	

$$D_1 = Q_1'$$

$Q_1 Q_0$

Q_2

	00	01	11	10
0	X	1	0	X
1	0	X	X	1

$$D_0 = Q_1' Q_0 + Q_1 Q_0' = (Q_1 \oplus Q_0)$$

Q_2	Q_1	Q_0	Q_2^+	Q_1^+	Q_0^+
0	0	0	1	1	0
0	0	1	0	1	1
0	1	0	0	0	1
0	1	1	1	0	0
1	0	0	1	1	0
1	0	1	0	1	1
1	1	0	0	0	1
1	1	1	1	0	0

$$D_2 = (Q_1 \oplus Q_0)'$$

$$D_1 = Q_1'$$

$$D_0 = Q_1 \oplus Q_0$$

