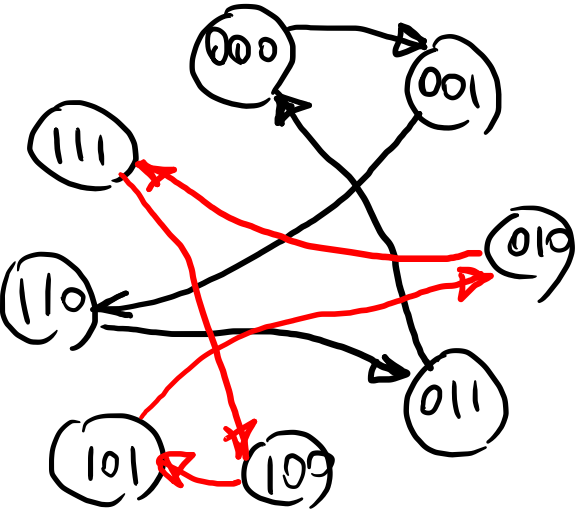


$$D_2 = q_0 \oplus q_1 \oplus q_2$$

$$D_1 = q_0 \oplus q_1$$

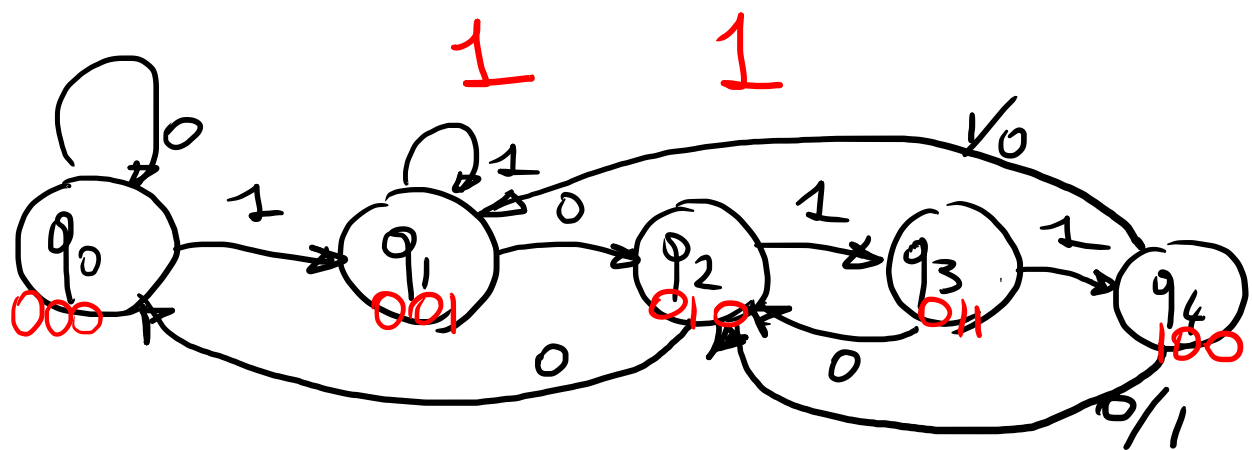
$$D_0 = \overline{q_0}$$

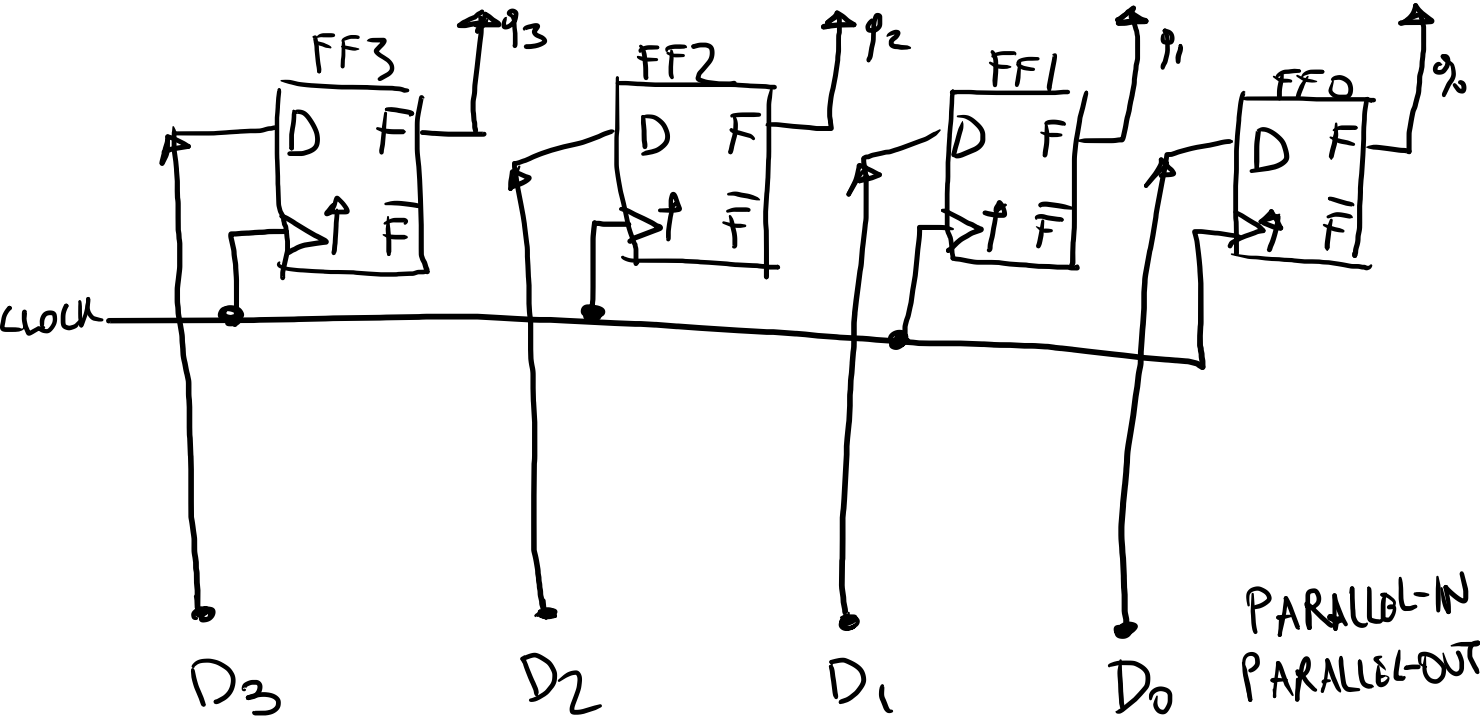
$$\begin{cases} D_2 = q_0 \oplus q_1 \oplus q_2 \\ D_1 = q_0 \oplus q_1 \\ D_0 = \overline{q_0} \end{cases}$$

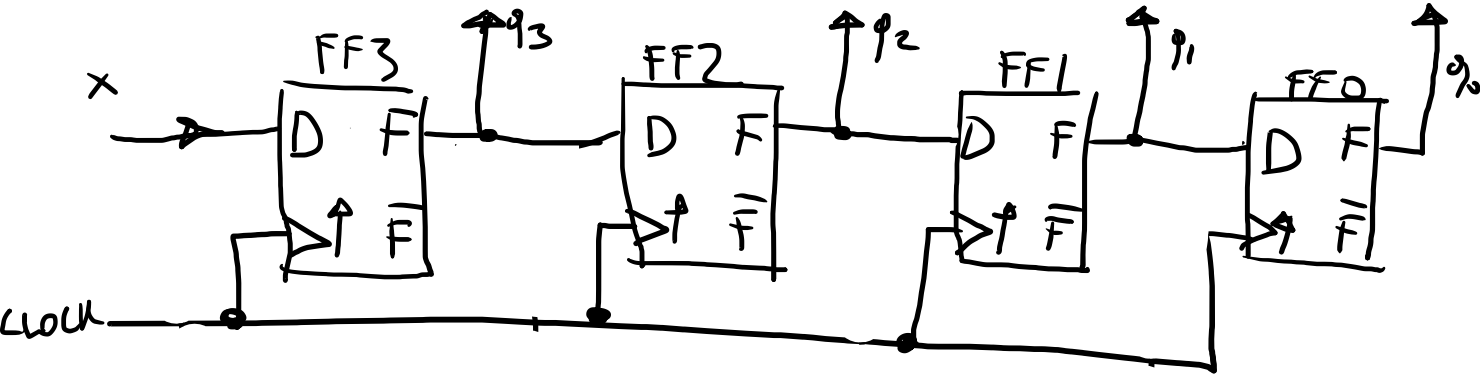


$q_2 q_1 q_0$	$D_2 D_1 D_0$	$q'_2 q'_1 q'_0$
0 0 0	0 0 1	0 0 1
0 0 1	1 1 0	1 1 0
0 1 0	1 1 1	1 1 1
0 1 1	0 0 0	0 0 0
1 0 0	1 0 1	1 0 1
1 0 1	0 1 0	0 1 0
1 1 0	0 1 1	0 1 1
1 1 1	1 0 0	1 0 0

000 101 10110 111



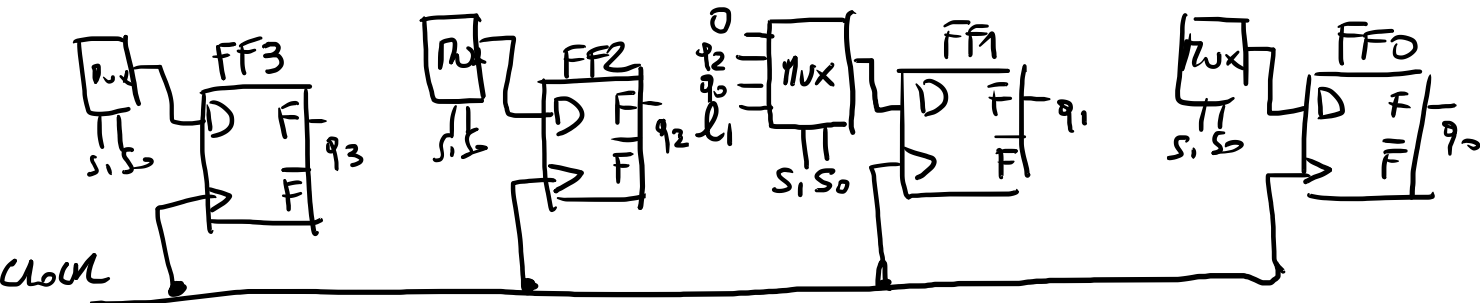




1011

SERIAL-IN / PARALLEL-OUT

SHIFT REGISTER



$s_1 s_0$	q_1	
0 0	0	RESET
0 1	q_2	SHIFT RIGHT
1 0	q_0	SHIFT LEFT
1 1	l_1	PARALLEL-IN