

Seq:-

Latch:-

$$d_n = 1$$

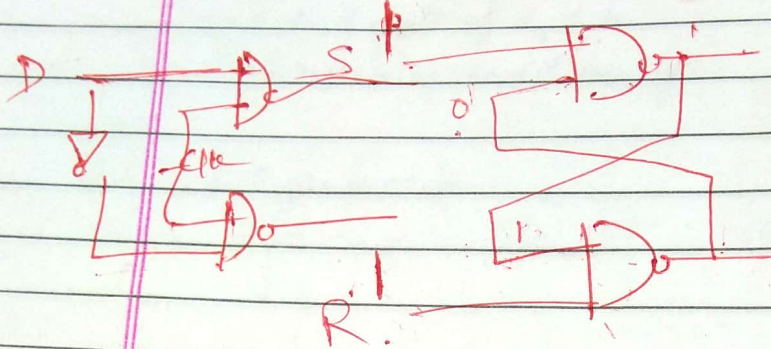
$$q_n = 1$$

$$q_n = 0$$

$$q_{n+1} = 0$$

$$q_{n+1} = 1, 0$$

$$q_n = 1$$



style $q_p = 0$,
 $q/p = 1$

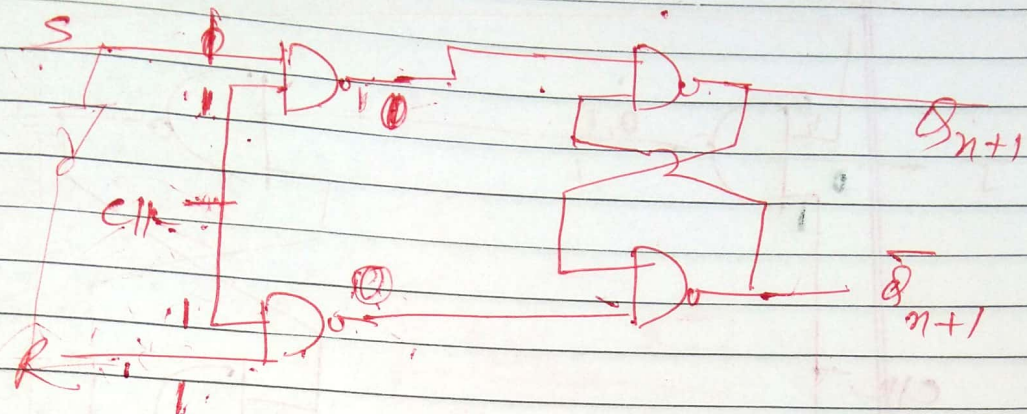
S	R	q_{n+1}	\bar{q}_{n+1}
0	0	1*	1*
0	1	1	0
1	0	0	1
1	1	q_n	\bar{q}_n

(forbidden condⁿ)

(latch, FP)

(hold) 1-bit st

FF :- SR



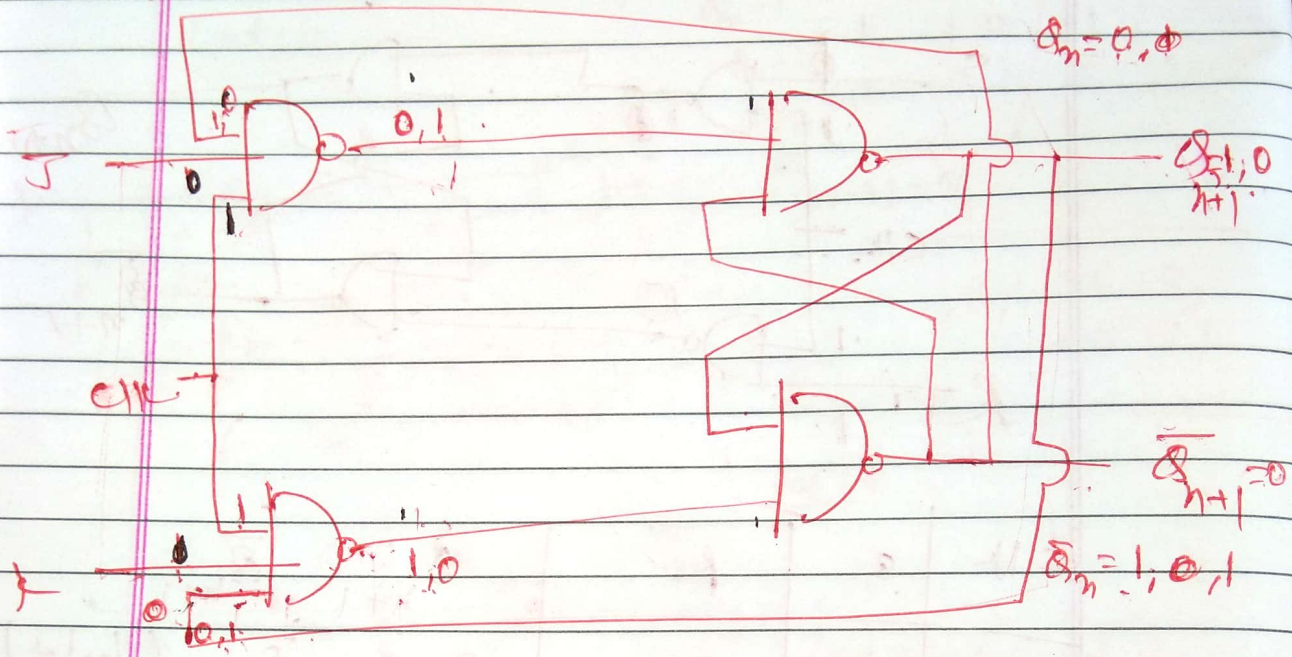
CLK	S	R	Q_{n+1}	\bar{Q}_{n+1}	
0	*	*	Q_n	\bar{Q}_n	(hold)
X	0	0	Q_n	Q_n	(hold)
1	0	1	0	1	(Set)
1	1	0	1	0	(Reset)
X	1	1	1	1	(for)

CLK	D	Q_{n+1}	\bar{Q}_{n+1}	
0	*	Q_n	\bar{Q}_n	(fabi.)
1	0	0	1	(Set)
1	1	1	0	(Reset)

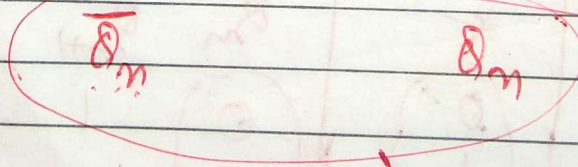
Date

Regis

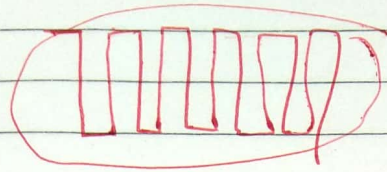
JK PF 1-



clk	J	K	Q_{n+1}	\bar{Q}_{n+1}
0	x	x	Q_n	\bar{Q}_n
1	0	0	Q_n	\bar{Q}_n
1	0	1	0	1
1	1	0	1	0
1	1	1	1	0

Toggle Condⁿ(race band condⁿ)

counter



T FF :

clk	T	Q_{n+1}	$\overline{Q_{n+1}}$
0	x	Q_n	$\overline{Q_n}$
1	0	Q_n	$\overline{Q_n}$
1	1	$\overline{Q_n}$	Q_n