

Convert JK to T-Flip flop.

Given flip flop is JK flip flop.

Required flip flop is T flip flop

Characteristic Table of TFF

$Q_n$	T	$Q_{n+1}$	J	K
0	0	0	0	X
0	1	1	1	X
1	0	1	X	0
1	1	0	X	1

← from excitation table

Excitation Table of JK

$Q_n$	$Q_{n+1}$	J	K
0	0	0	X
0	1	1	X
1	0	X	1
1	1	X	0

Boolean expression for the available flip-flop

Q <sub>n</sub>	T	
	0	1
0	0	1
1	x	x

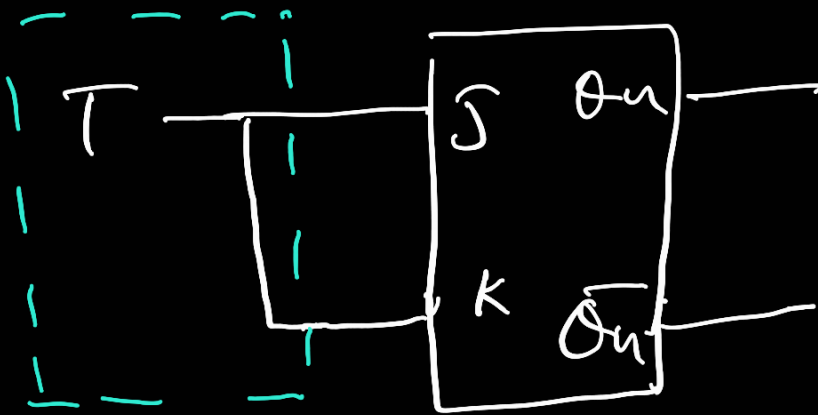
for  $J = T$

Q <sub>n</sub>	T	
	0	1
0	x	x
1	0	1

$K = T$

we obtain  $J = T$ ,  $K = T$

There for the required circuit is



↑  
Inversion logic

