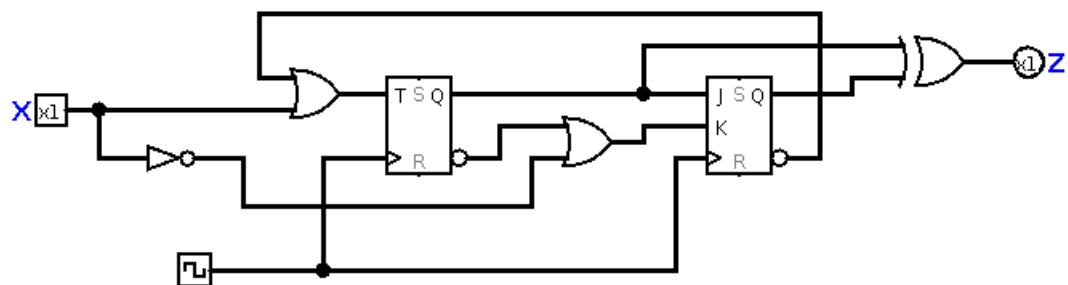


1. For the following circuit, the right flip-flop is a JK flip-flop and the left flip-flop is a T flip-flop.
 - (a) Create the transition tables for the two flip-flops.
 - (b) Create the transition table.
 - (c) Create the next state table.
 - (d) Create the output table.
 - (e) Create the next state/output table.
 - (f) Create the state diagram.



2. Design a sequential circuit that detects an input sequence of 0100 with overlap. Use only D flip-flops in your construction.
3. Design a sequential circuit that detects an input sequence of 0100 without overlap. Use only T flip-flops in your construction.

Flip-Flop Excitation Table

Q	Q^+	SR	D	JK	T
0	0	0d	0	0d	0
0	1	10	1	1d	1
1	0	01	0	d1	1
1	1	d0	1	d0	0