

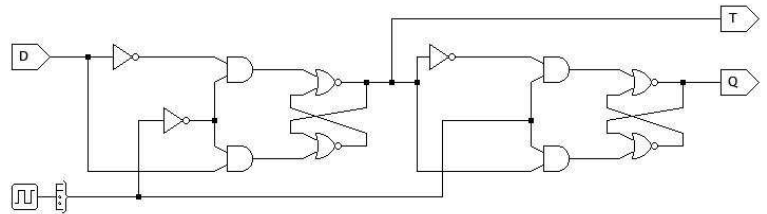
CIS 351 Sample SL2 Problem

06 January 2022

SL2: Flip-Flops

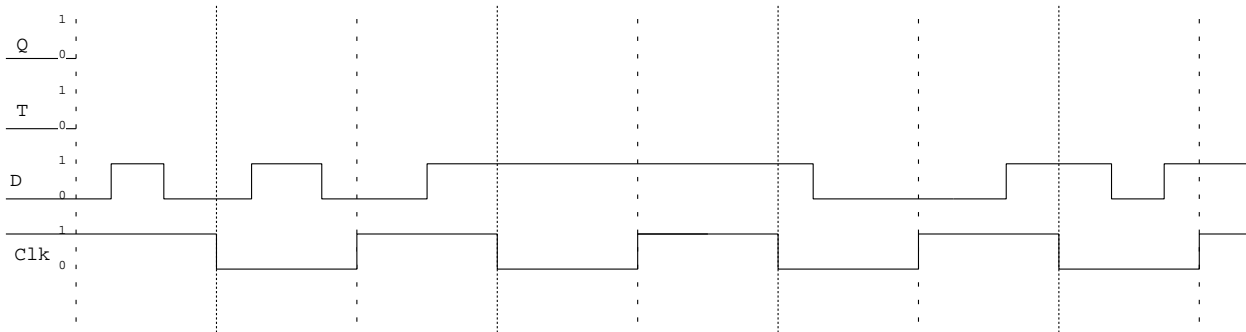
Consider the master-slave flip-flop shown to the right:

(a) Is this a rising-edge, or falling-edge flip-flop? How can you tell?



(b) Explain what gives this circuit its “instant trigger point.”

(c) Complete the timing diagram below that shows the *internal* operation of the master-slave flip-flop.



Name: _____

- (d) Complete the timing diagram below that shows the *external* behavior of the master-slave flip-flop. (This is similar to problems 6-8 on the Sequential Circuit lab.)

