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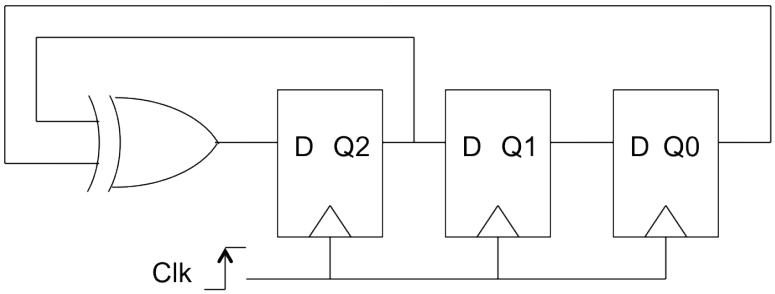
Quiz #37 – Counter Fun

Name: _____



Each time the clock rises, the above counter changes state to the next count. Fill in the table below showing the count sequence starting at 001.

Q2 Q1 Q0
0 0 1

Fill in the table below showing the count sequence starting at 000.

Q2 Q1 Q0
0 0 0

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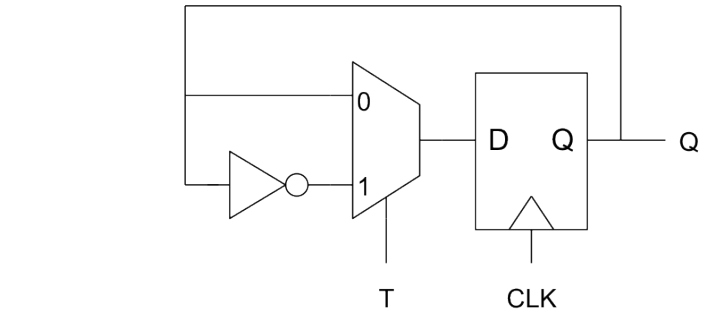
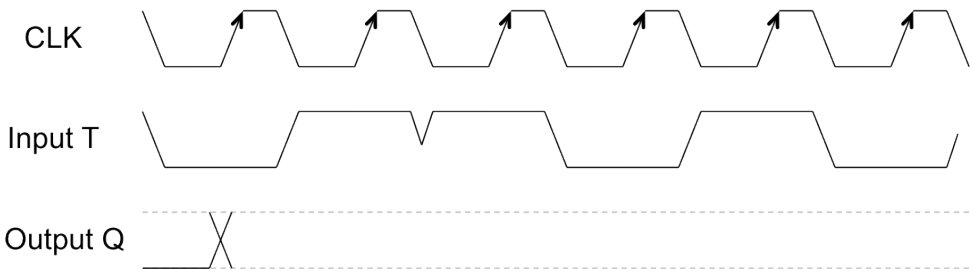
Quiz #38 – Timing Diagram

Name: _____

Fill in the timing diagram for the circuit below.





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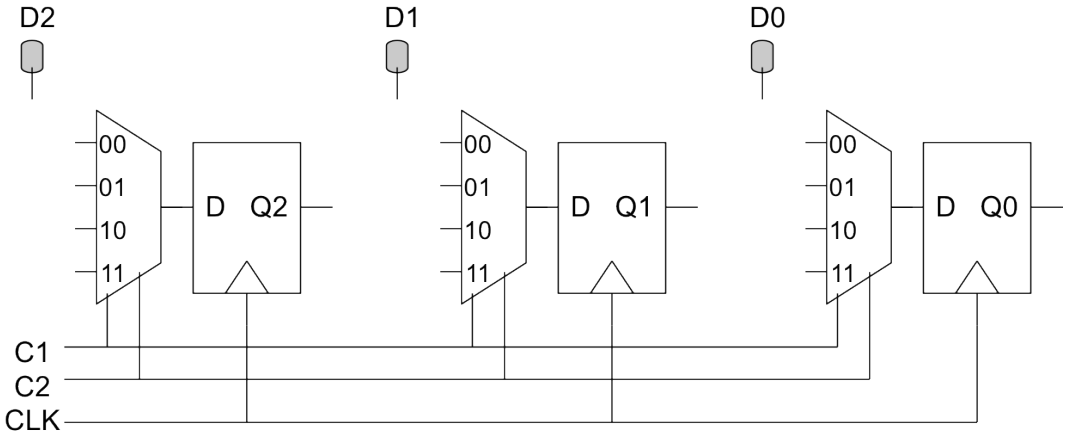
Quiz #39 – Loadable Register

Name: _____

Complete the loadable register circuit below.



C1	C2	Q
0	0	Hold
0	1	~Q
1	0	Rotate Left (Q2 ← Q1 ← Q0 ← Q2)
1	1	Load D

Fill in the timing diagram below for the above circuit by filling in the values of Q after each rising edge of the clock.