

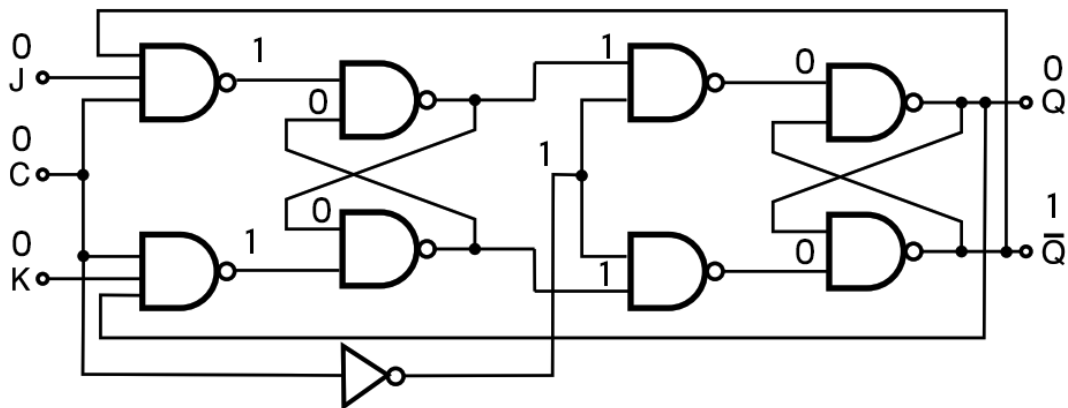
CH-232-A

Answers to ICS 2020 Problem Sheet #9

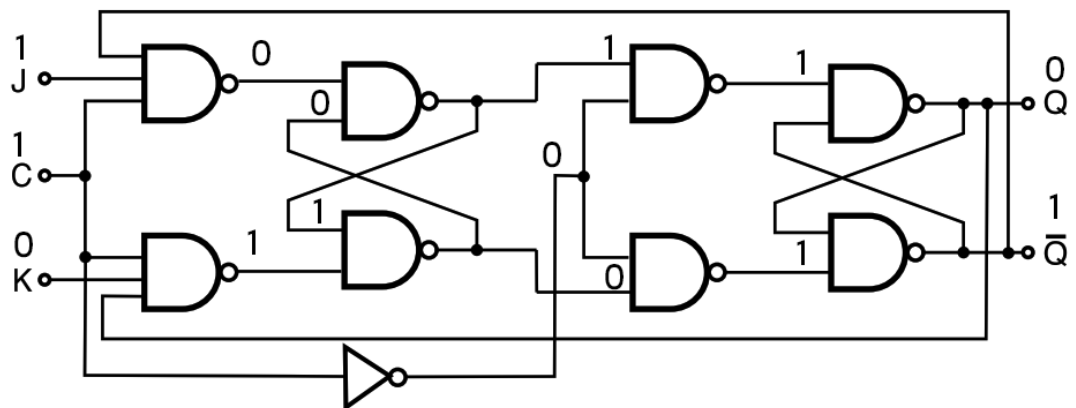
Blen Daniel Assefa

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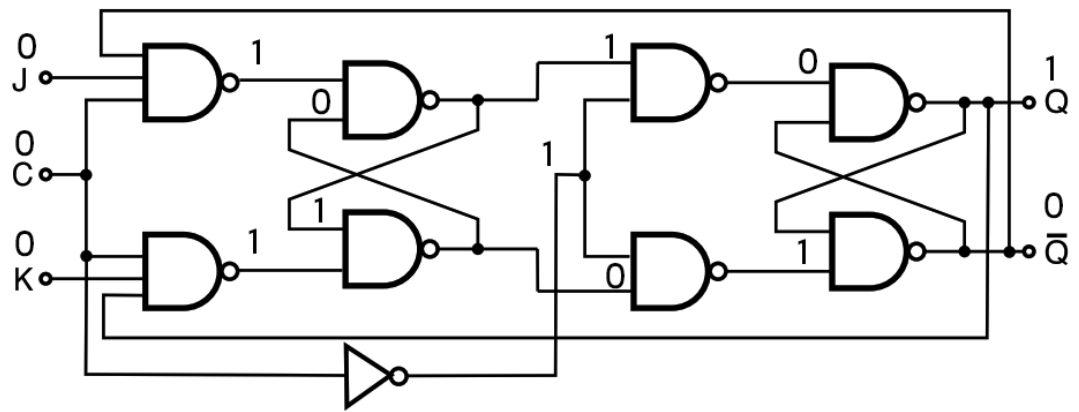
Initially



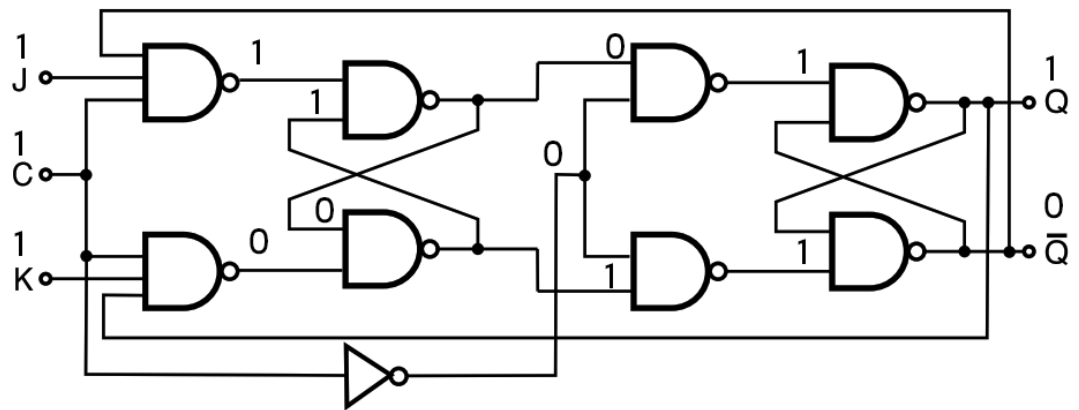
1. A)



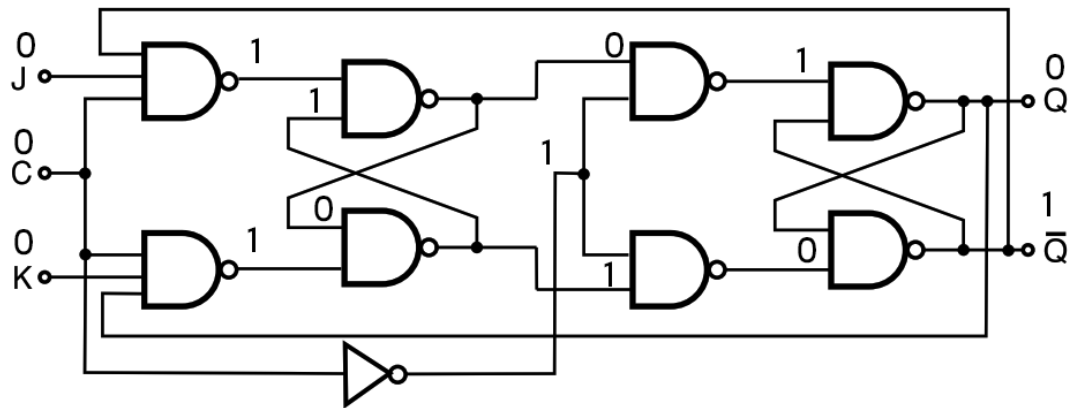
B)



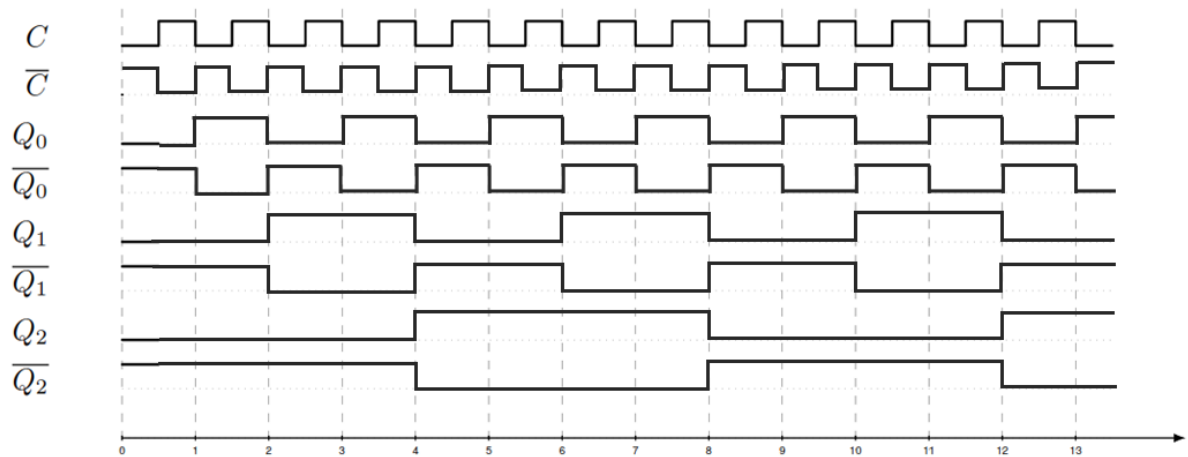
c)



D)



2. A)



B) No there is not. It is because no matter how many D flip flops that are added to the chain, it does not affect the ripple counter. It will not create a time delay so basically the ripple counter will not be affected.