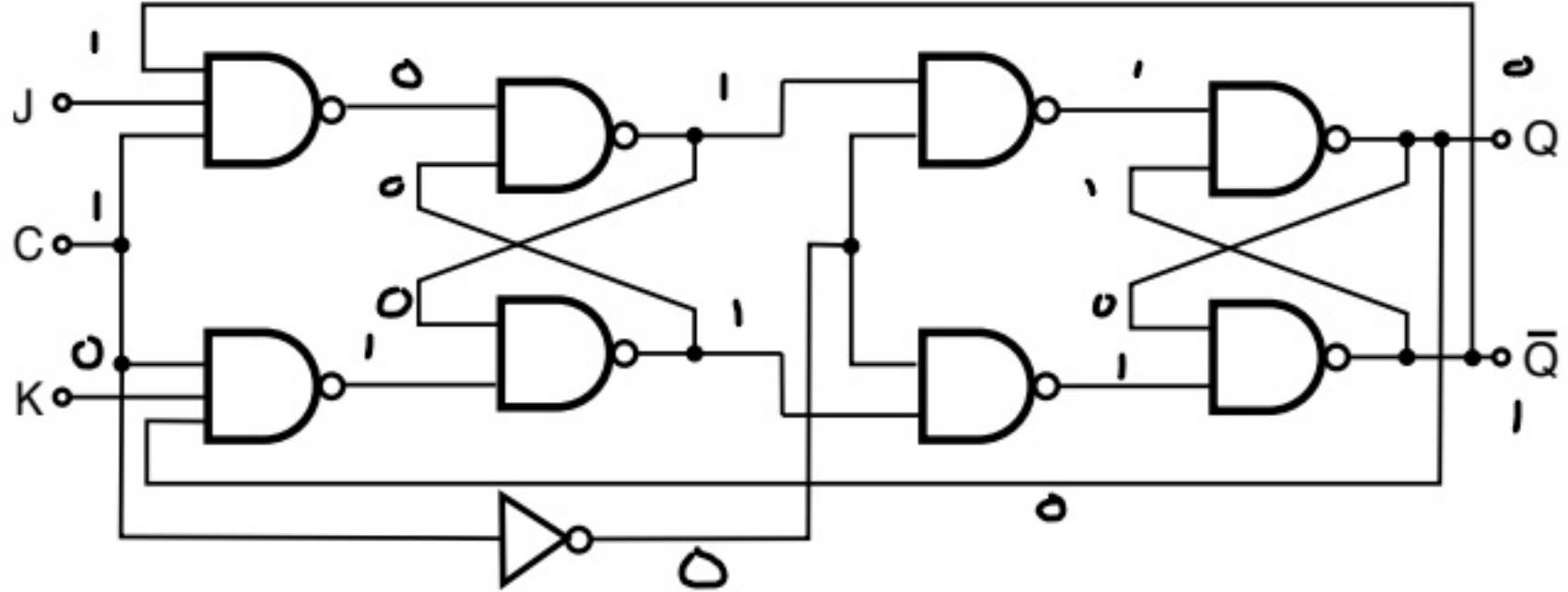
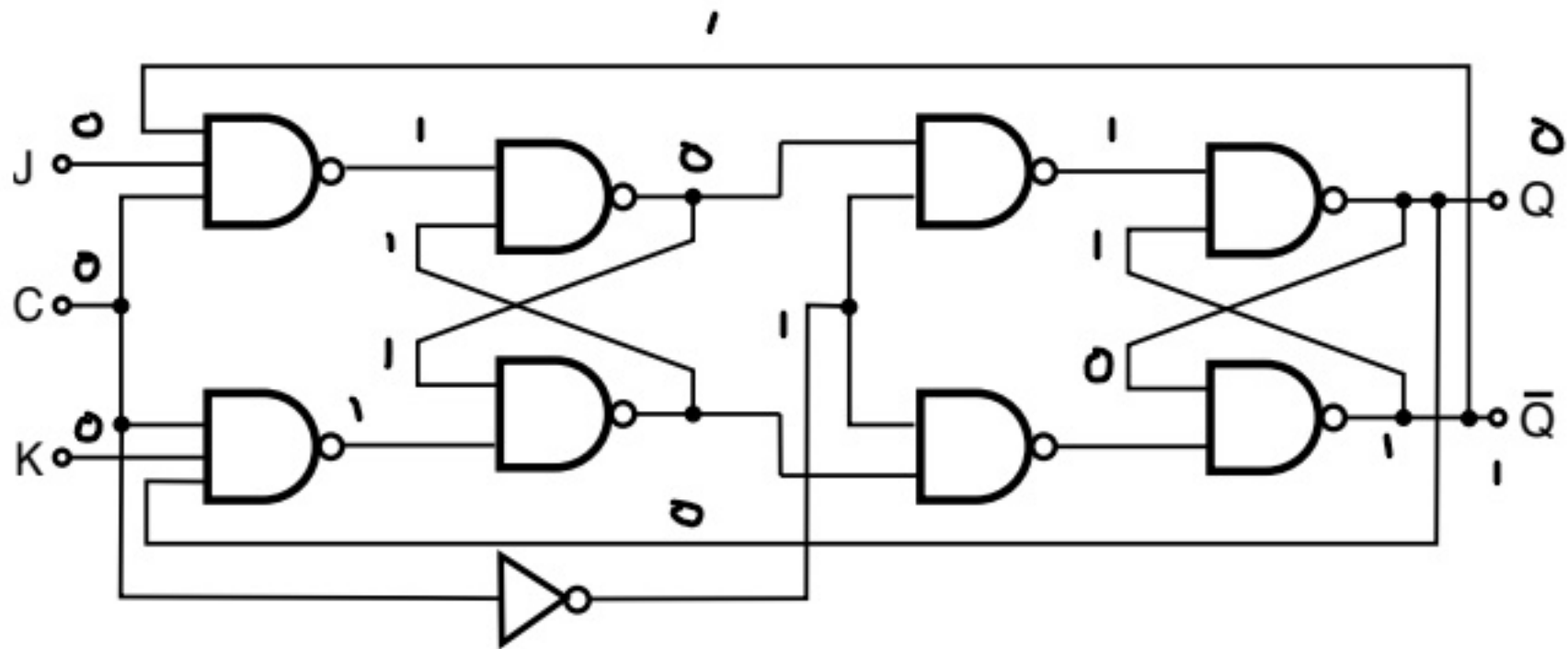


Problem 1

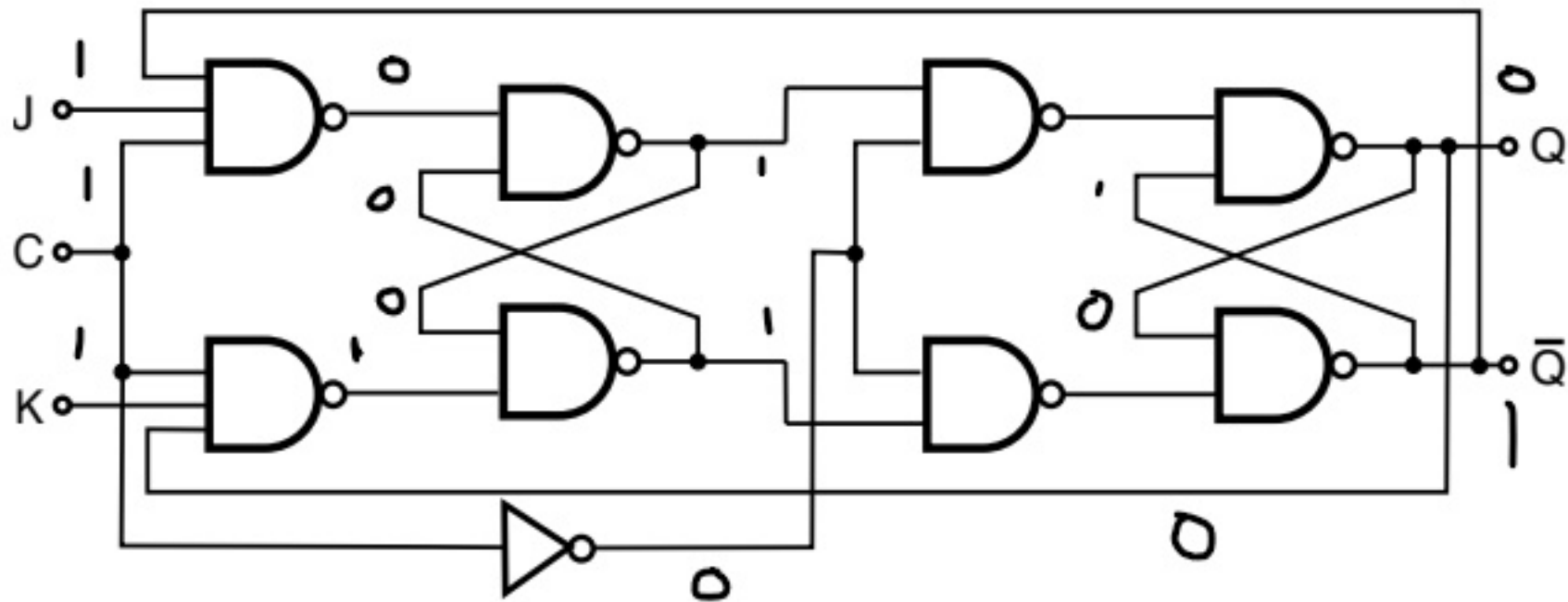
a)



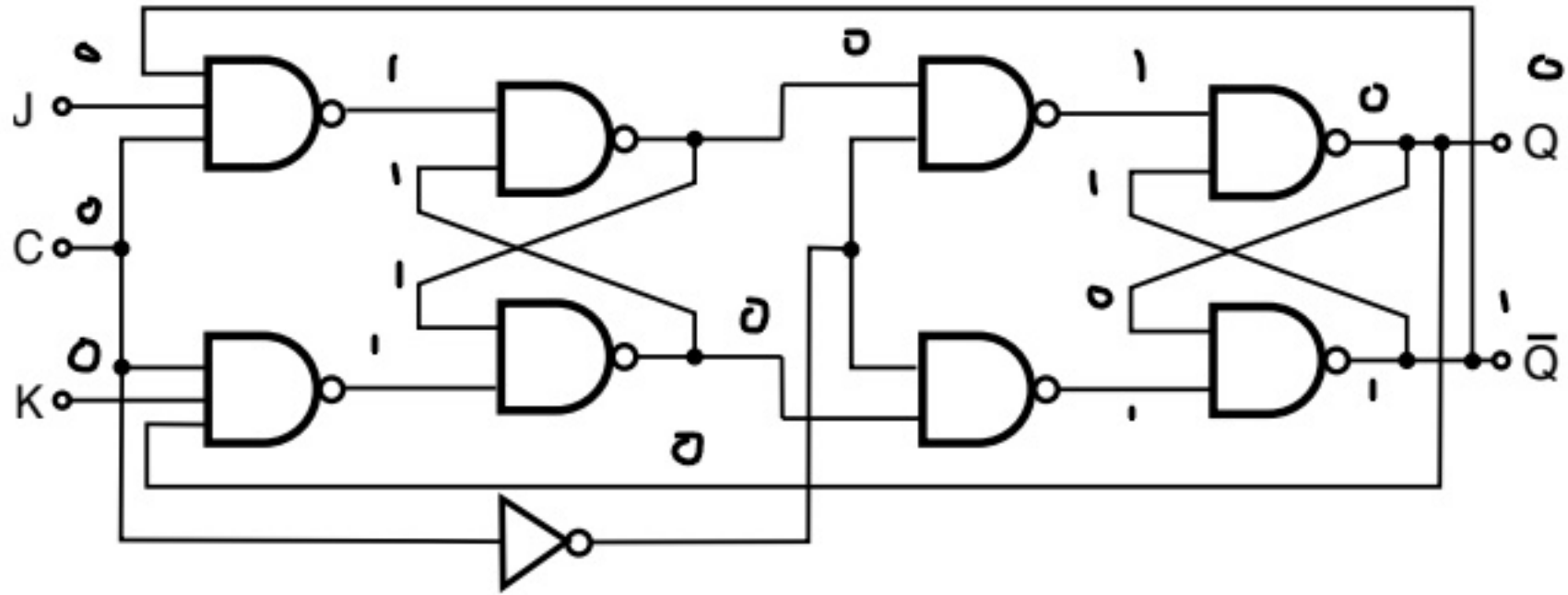
b)

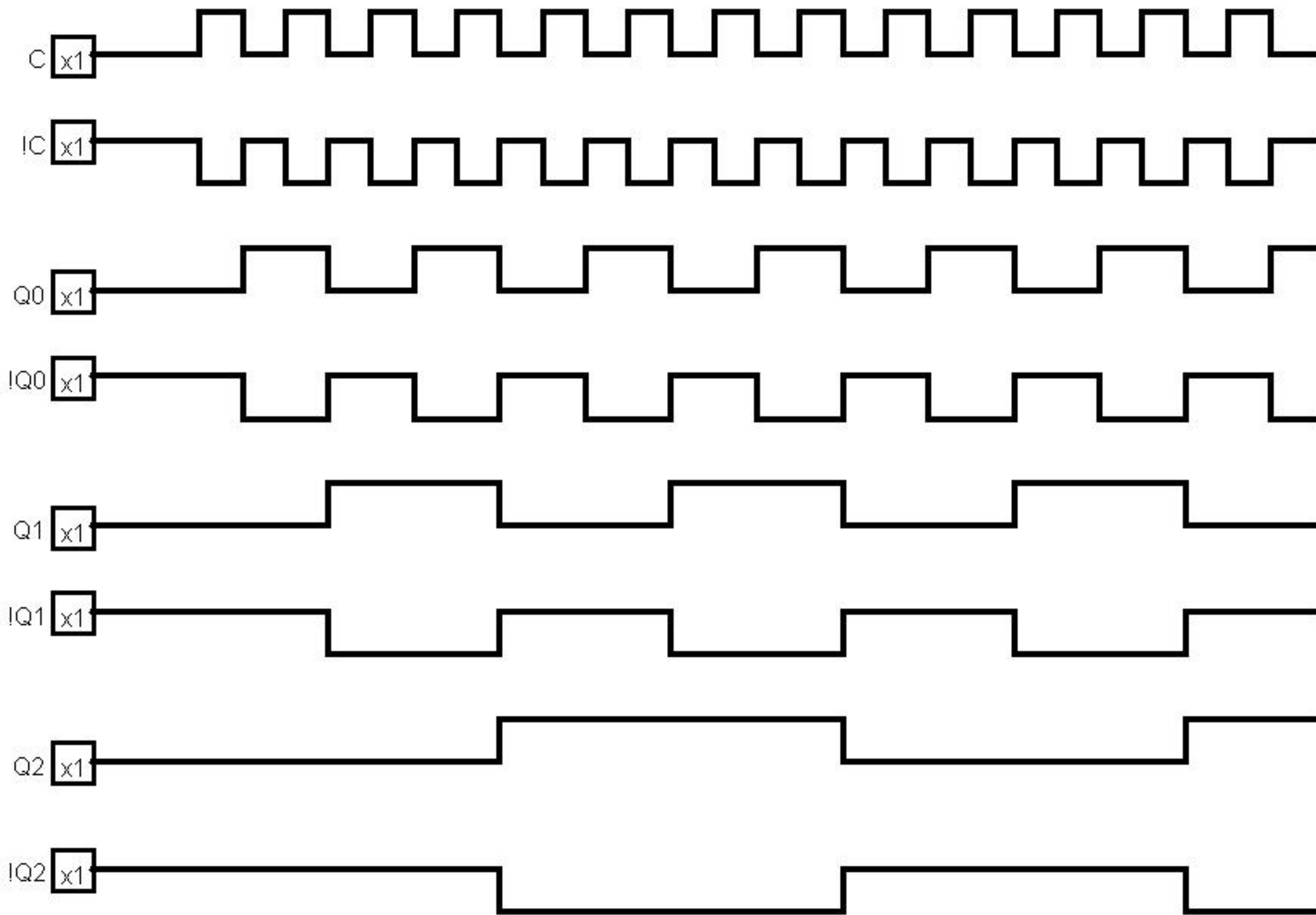
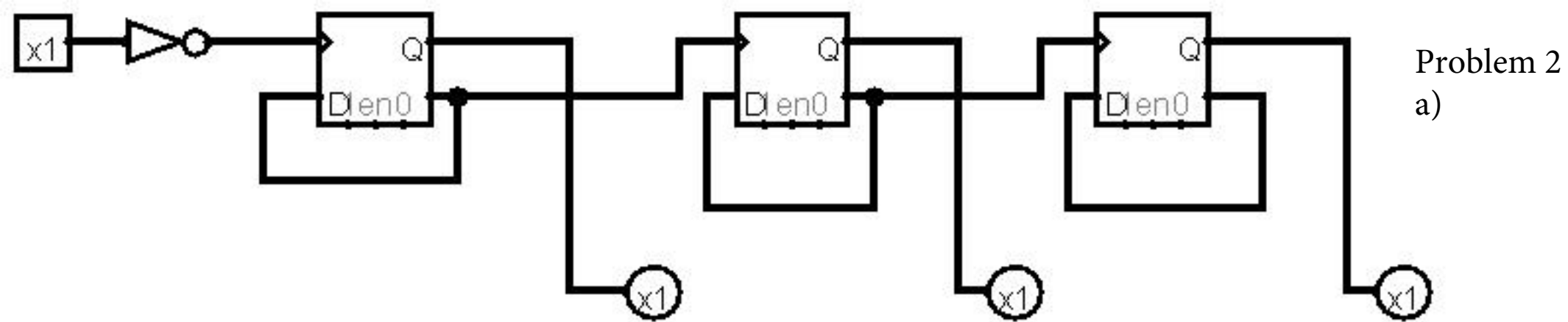


c)



d)





b)

Yes it can become arbitrary long but the output delay will be huge and more the flip flops but delay will be generated means the last output will come after long time.