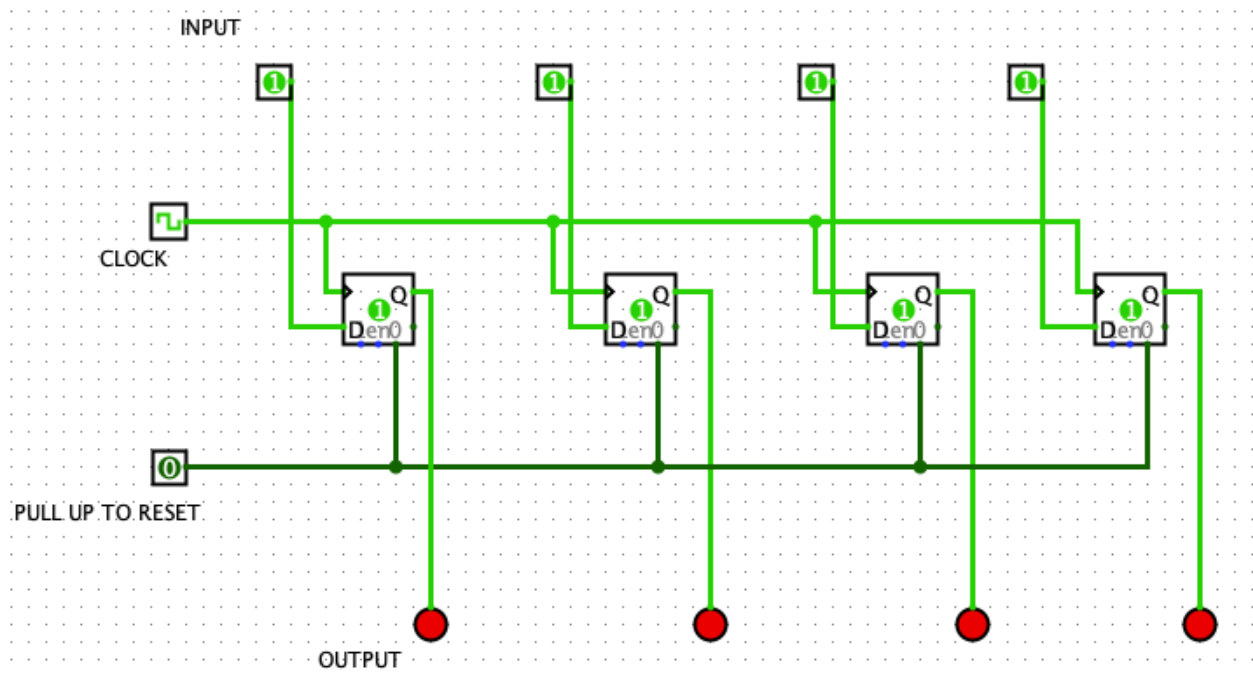


Lab 3

Aaryan Pujara

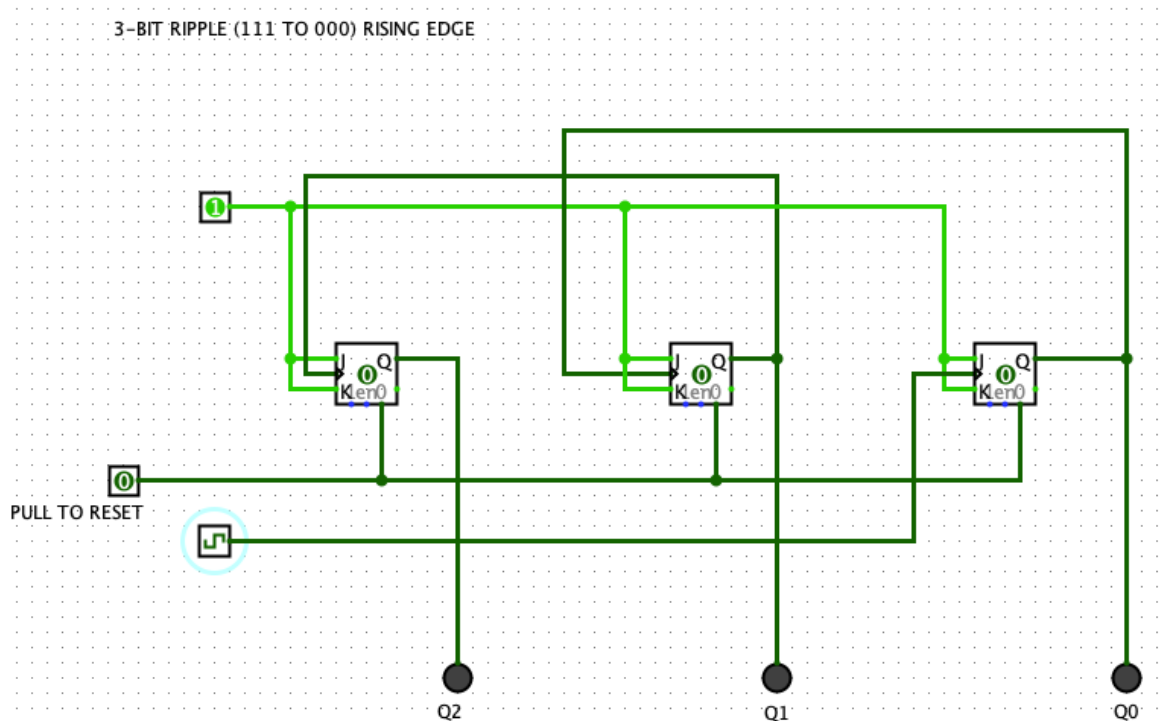
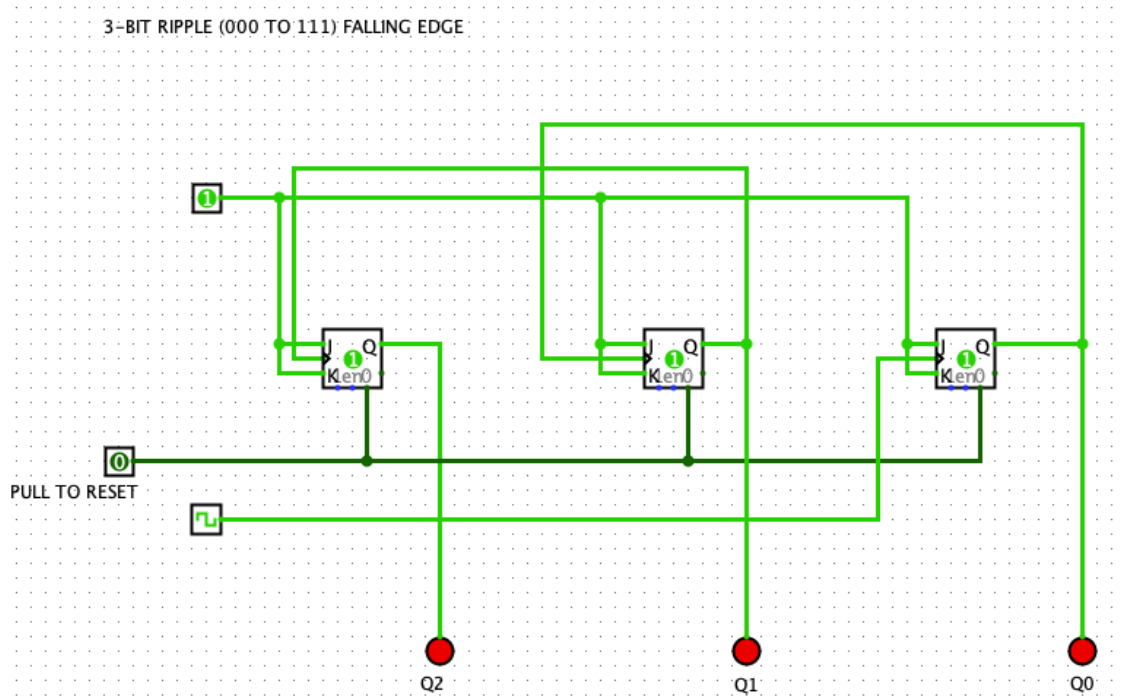
102599490

4-bit register:

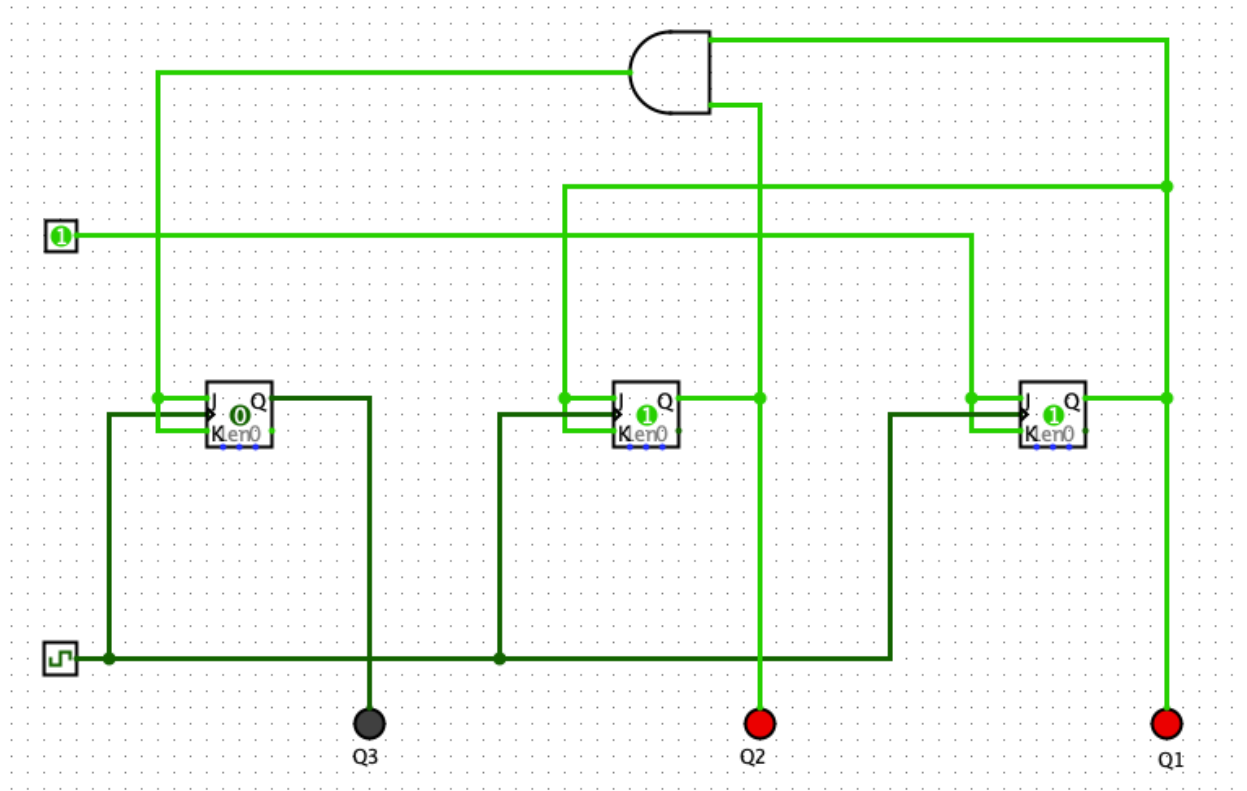


0X	INPUT	OUTPUT
0	0000	0000
1	0001	0001
2	0010	0010
3	0011	0011
5	0101	0101
A	1010	1010
B	1011	1011
C	1100	1100
D	1101	1101
E	1110	1110
F	1111	1111

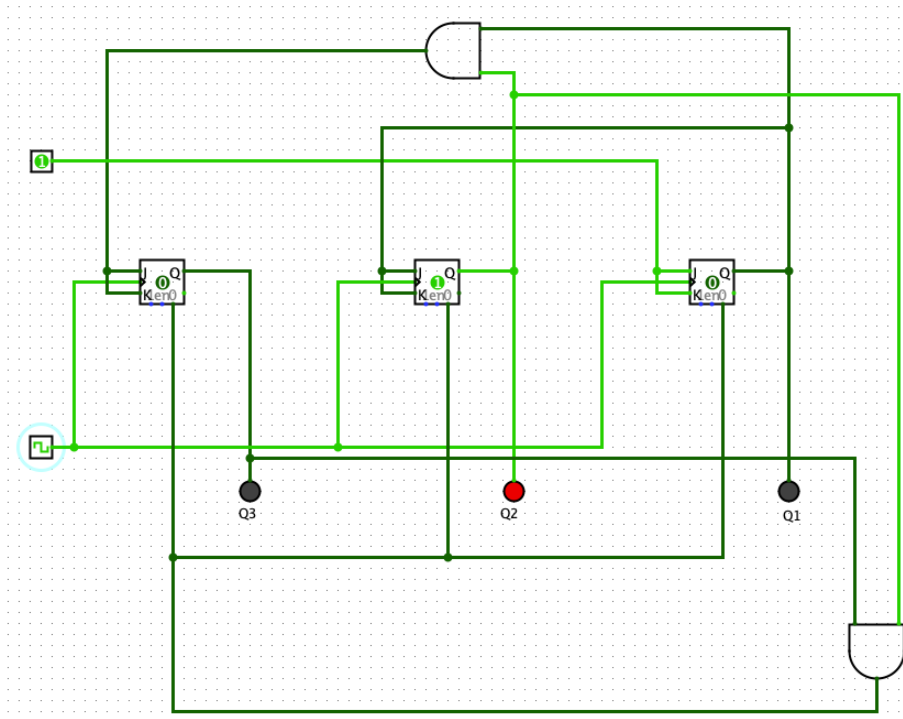
- 1) Counter helps in counting the number of occurrences in a circuit it can also store and increment the number of occurrences in the circuit.
- 2) The ripple flip flop is called by its name because only the first flip flop is clocked by a clock all the rest of them are clocked by the output of the previous ones. A ripple is happened when clock pulse travels through the flip flops.



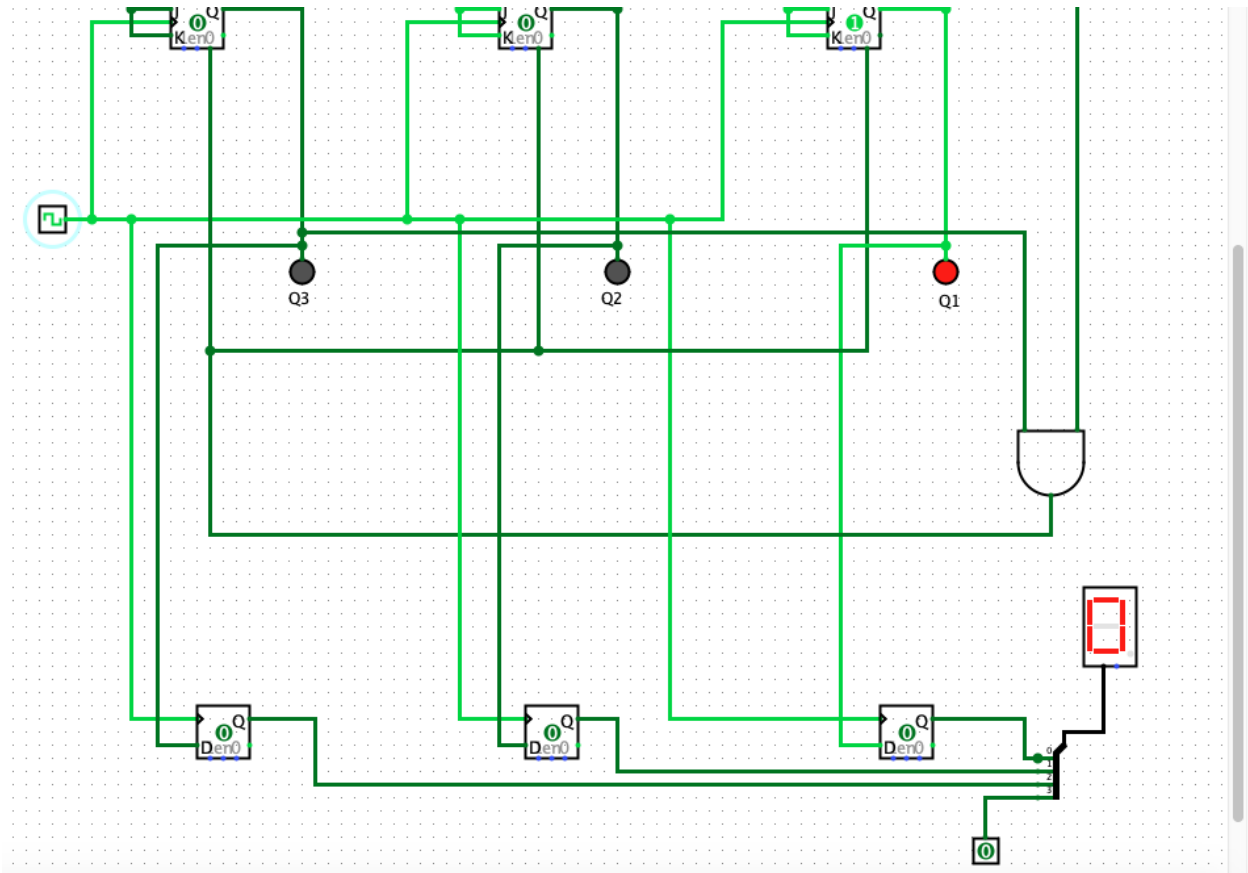
3-BIT COUNTER WITH COMMON CLOCK



MOD 6



MOD 6 BUFFER w hex



3) not handling such things can lead to illegal state which can potentially ruin the functioning of the circuit.