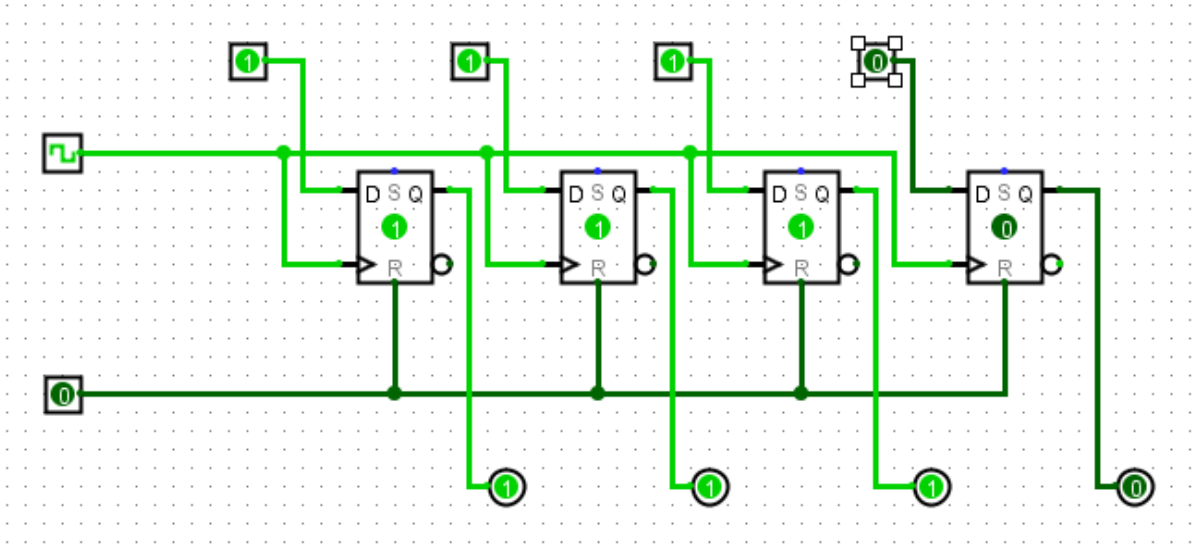
COMPUTER SYSTEM

LAB 03

TRAN DUC ANH DANG

103995439

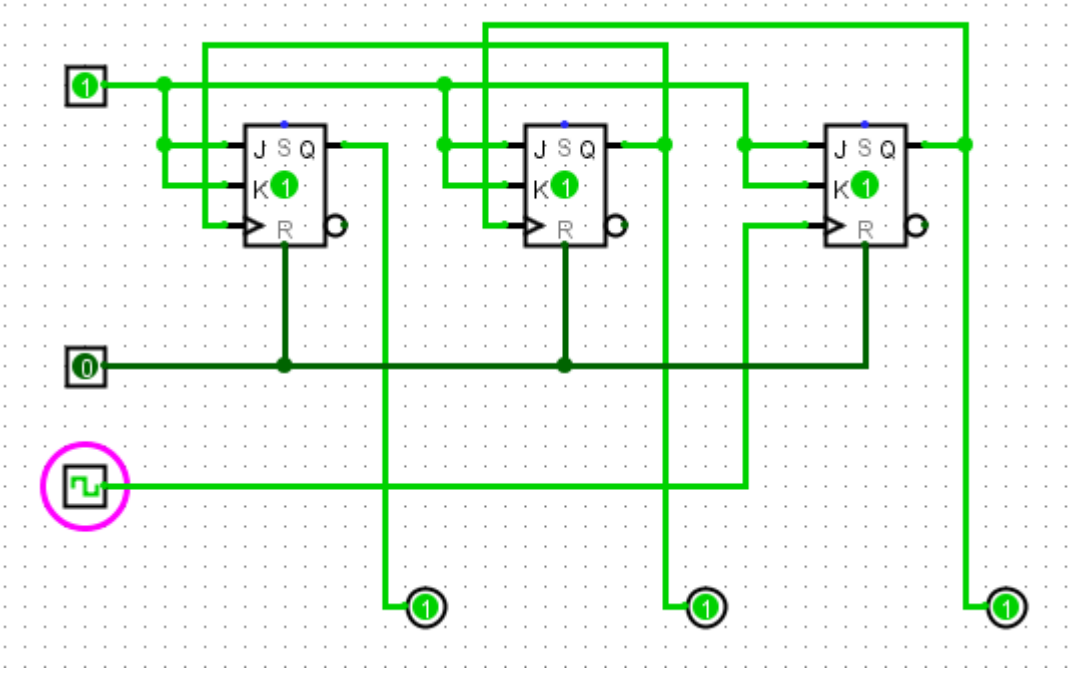
4-bit Register

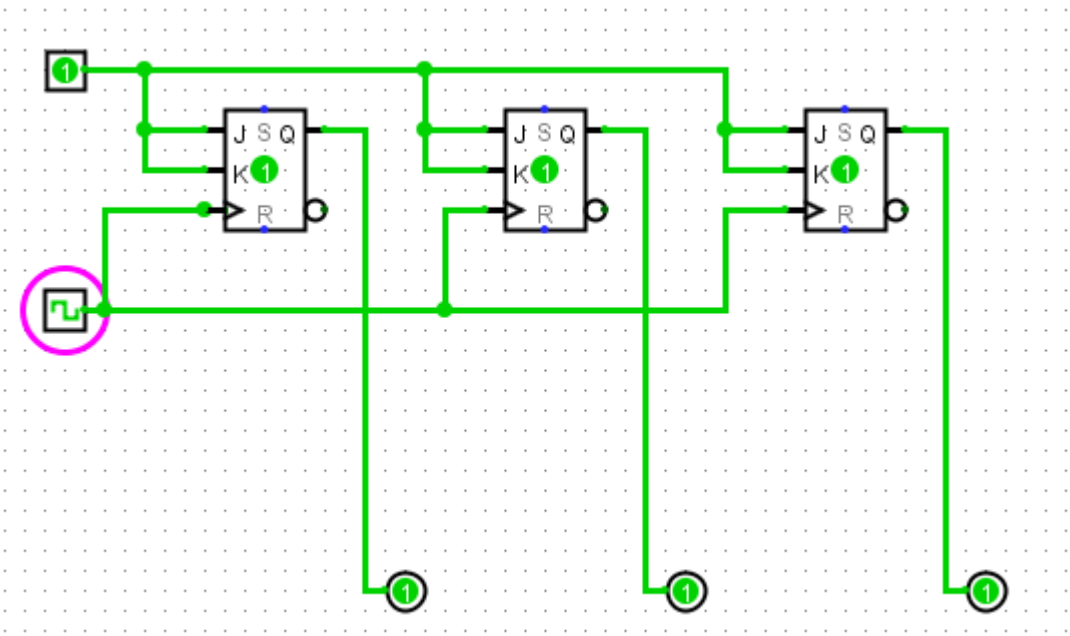


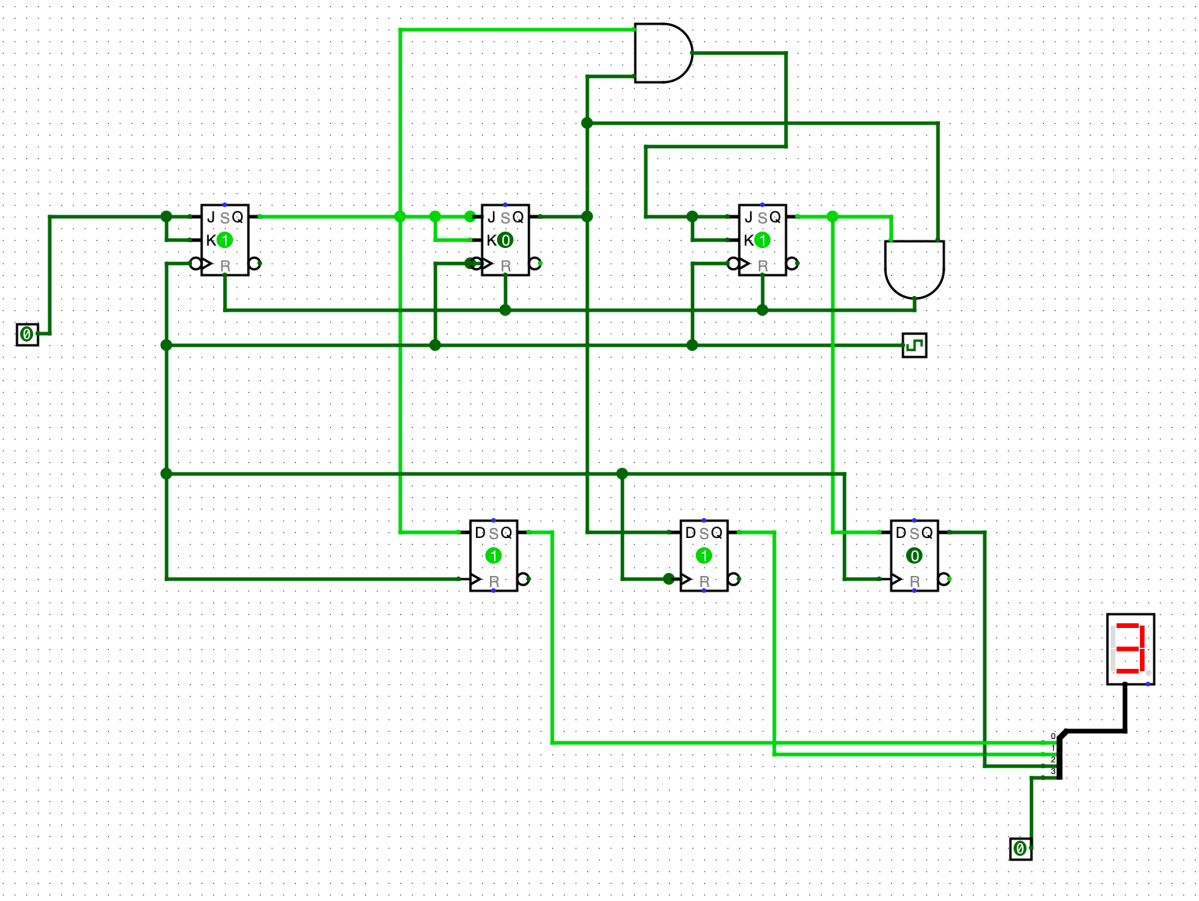
Ox	Input	Output
0	0000	0000
1	0001	0001
2	0010	0010
3	0011	0011
5	0101	0101
A	1010	1010
B	1011	1011
C	1100	1100
D	1101	1101
E	1110	1110
F	1111	1111

7.1 - Keeping track of the time, Microprocessors

7.2 - A ripple counter is an asynchronous counter in which an external clock only synchronises the first flip-flop. The output of the previous flip-flop serves as the clock for all subsequent flip-flops.


J S Q
K
R
1
0


J S Q
K
R
1


J S Q
K 1
R
J S Q
K 0
R
J S Q
K 1
R
D S Q
1
R
D S Q
1
R
D S Q
0
R
0
0
0
0
0
0
0