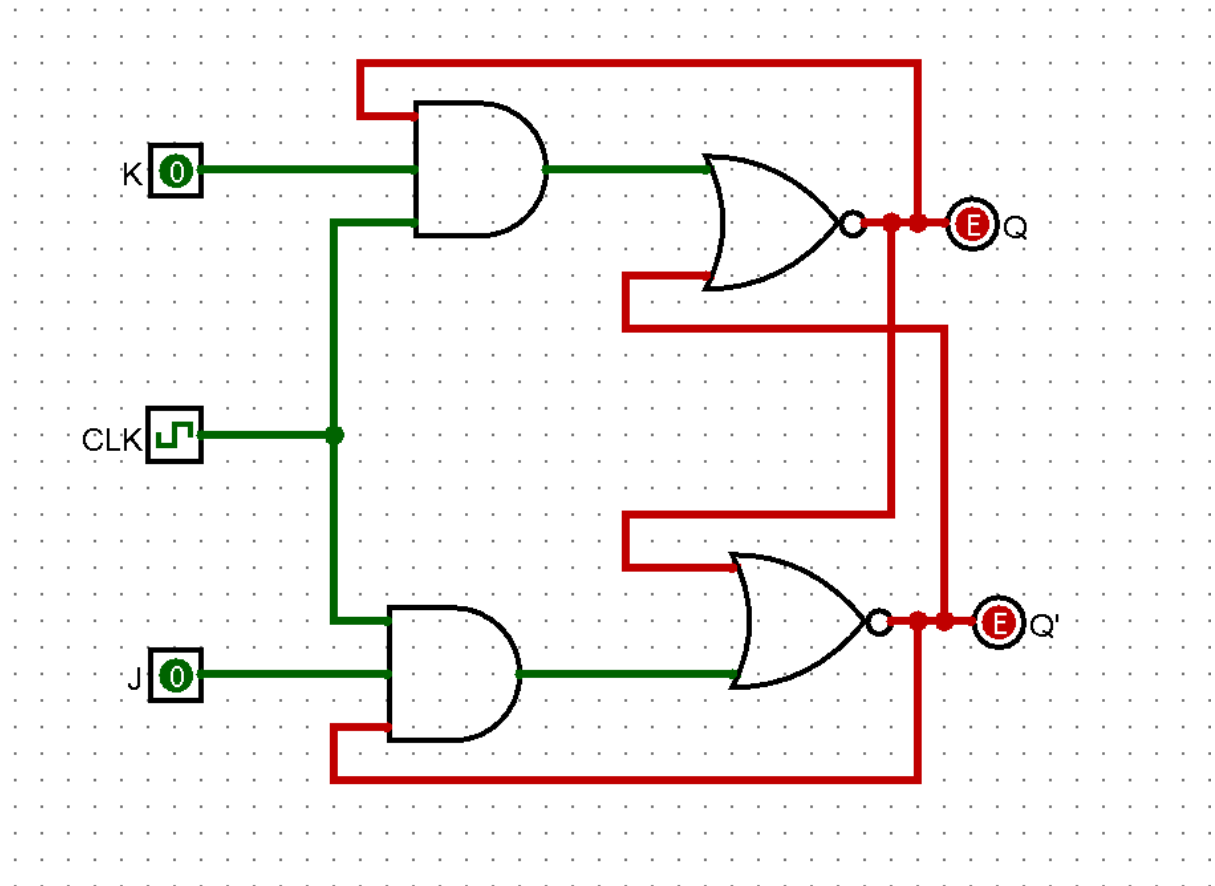Md. Ishtiaq Ahamed Fahim
2012518642
Lab-8
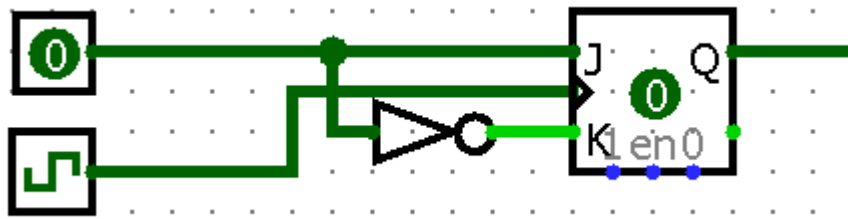
J-K Flip-flop using AND and NOR gates:

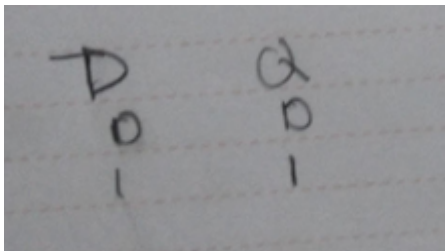Logisum:

Proof and Discussion:

J	K	Q — Q'	Q	Q'
1	0		0	1
	0	+ — 0	0	1
0	0	+ — 0	0	1
0	0		0	1
1	1		0	1
1	1		0	1
1	1			

Not supported oscillator
1   0
Oscillator

Not supported

J-K Flip-flop using AND and NOR gates:

Logisum:

Proof and Discussion:

T	Q
0	0
1	1

D Flip-flop using a J-K Flip-flop:

Logisum:

Proof and Discussion:

Register:

Logisum:
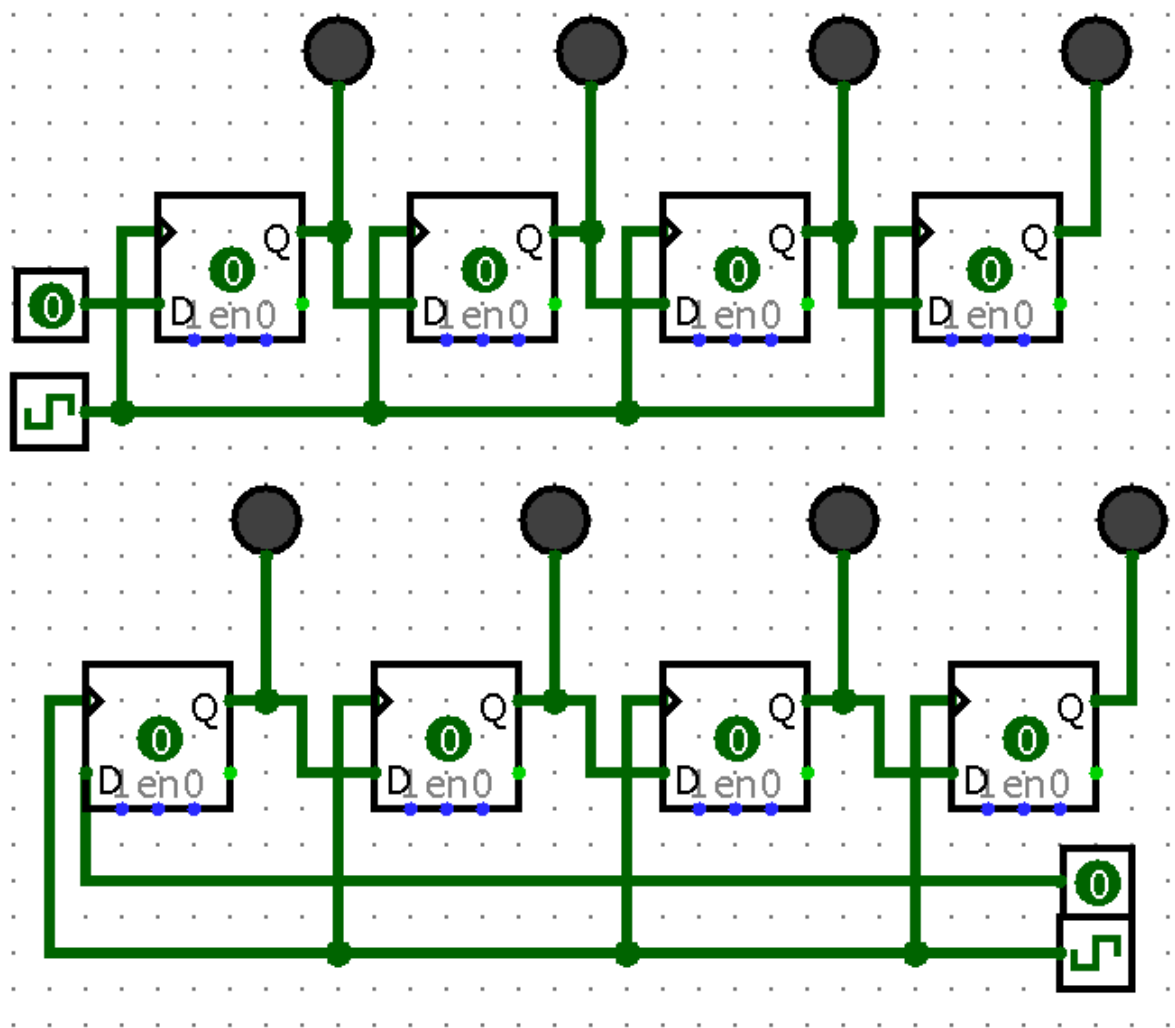
Proof and Discussion:

Input

X	e/c	output
1		1000
0		0100
1		0010
0		0101