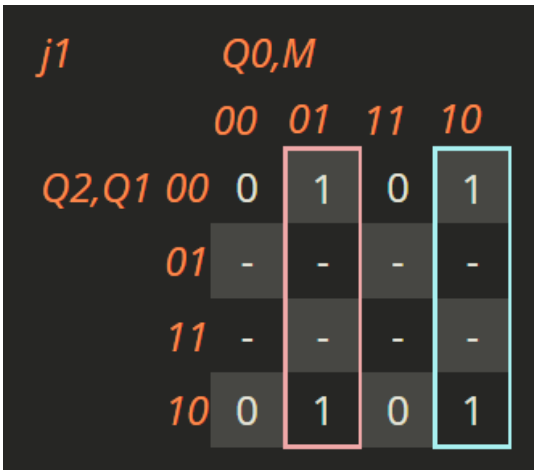
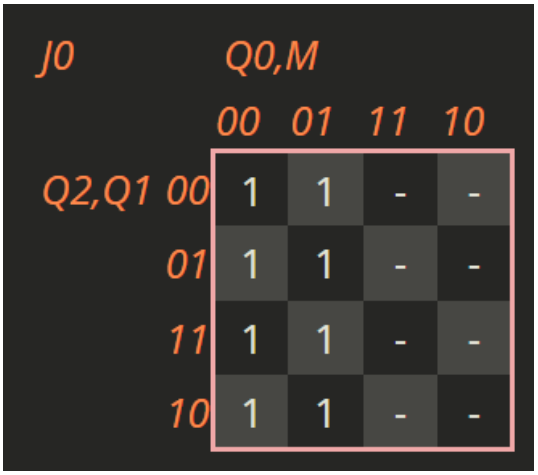
TRUTH TABLE FOR THE 3 BIT UP-DOWN COUNTER

Q_2	Q_1	Q_0	M	Q_{2next}	Q_{1next}	Q_{0next}	J_2	K_2	J_1	K_1	J_0	K_0
0	0	0	0	0	0	1	0	X	0	X	1	X
0	0	1	0	0	1	0	0	X	1	X	X	1
0	1	0	0	0	1	1	0	X	X	0	1	X
0	1	1	0	1	0	0	1	X	X	1	X	1
1	0	0	0	1	0	1	X	0	0	X	1	X
1	0	1	0	1	1	0	X	0	1	X	X	1
1	1	0	0	1	1	1	X	0	X	0	1	X
1	1	1	0	0	0	0	X	1	X	1	X	1
0	0	0	1	1	1	1	1	X	1	X	1	X
0	0	1	1	0	0	0	0	X	0	X	X	1
0	1	0	1	0	0	1	0	X	X	1	1	X
0	1	1	1	0	1	0	0	X	X	0	X	1
1	0	0	1	0	1	1	X	1	1	X	1	X
1	0	1	1	1	0	0	X	0	0	X	X	1
1	1	0	1	1	0	1	X	0	X	1	1	X
1	1	1	1	1	1	0	X	0	X	0	X	1

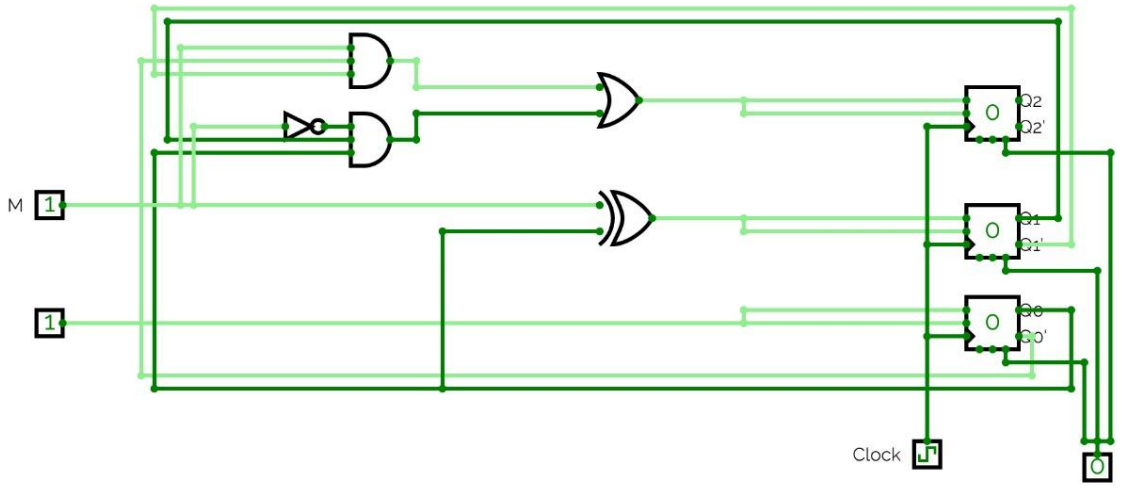
K-MAPS:





J2=Q1'Q0'M+Q1Q0M'
K2=Q1'Q0'M+Q1Q0M'
J1=Q0'M+Q0M'
K1=Q0'M+Q0M'
J0=1
K0=1

CIRCUIT DIAGRAM:



Link to circuit:
https://circuitverse.org/users/107641/projects/elp201-project-e72c1793-e995-4ebf-b4db-99e8b08cfe47