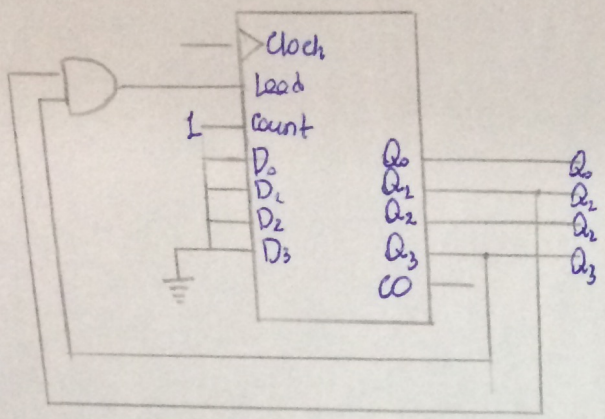
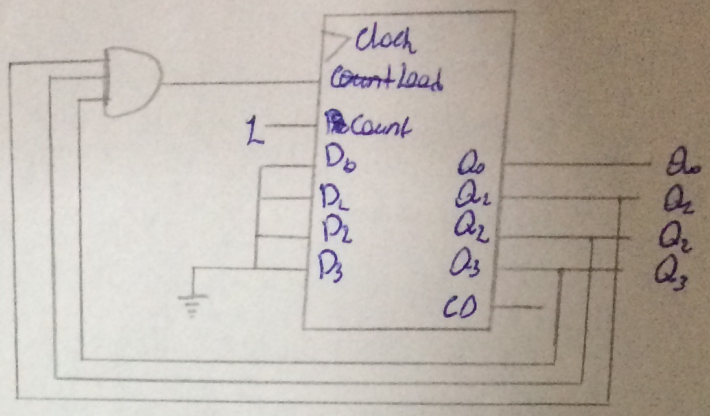
(11) Using the synchronous binary counter and AND gate

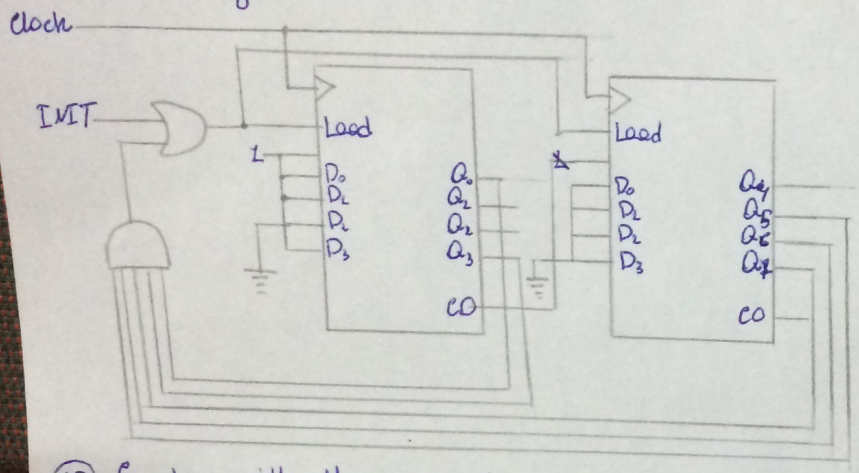
a) Counter 0000 through 1010 b) Counter 0000 through 1110





(12) Binary counter that counts from decimal 11 through 233

In binary: 233: 11101001 where the order is $Q_7Q_6Q_5Q_4Q_3Q_2Q_1Q_0$



(15) Counter with the repeated sequence: 0, 2, 1, 3, 4, 5, 5, 7

Present State			Next State		
A	B	C	D_A	D_B	D_C
0	0	0	0	1	0
0	0	1	0	1	1
0	1	0	0	0	1
0	1	1	1	0	0
1	0	0	1	1	0
1	0	1	1	1	1
1	1	0	1	0	1
1	1	1	0	0	0