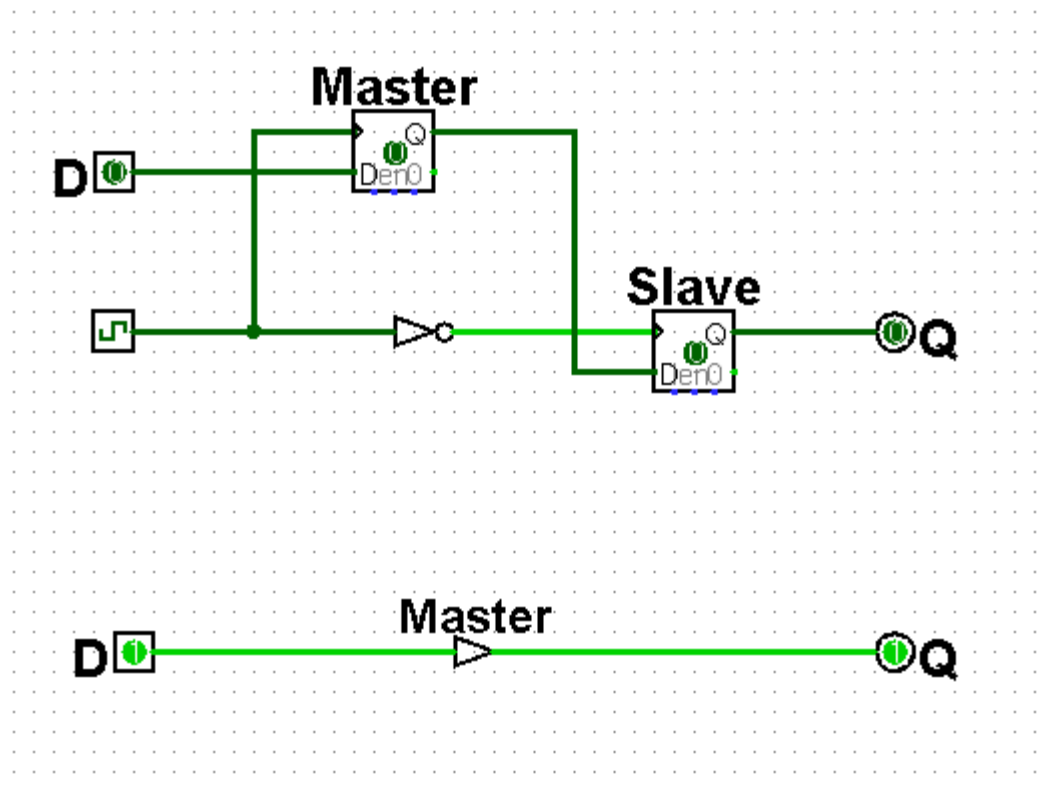


디지털공학 과제 logisim 3

Simulationusing Logisim #2

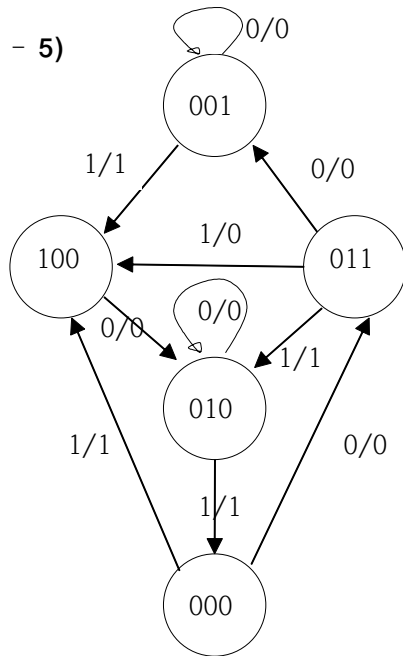
201501489 최영진

A - 1)



외부 입력 D의 값만이 Y의 값과 Q의 값에 영향을 끼친다.

B - 5)



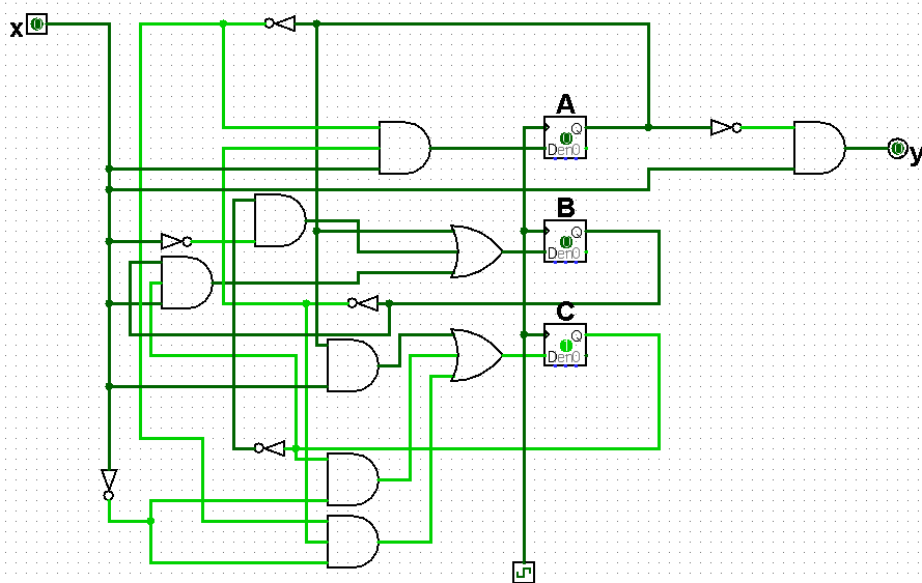
$$D_A = A'B'x$$

$$D_B = A + C'x' + BCx$$

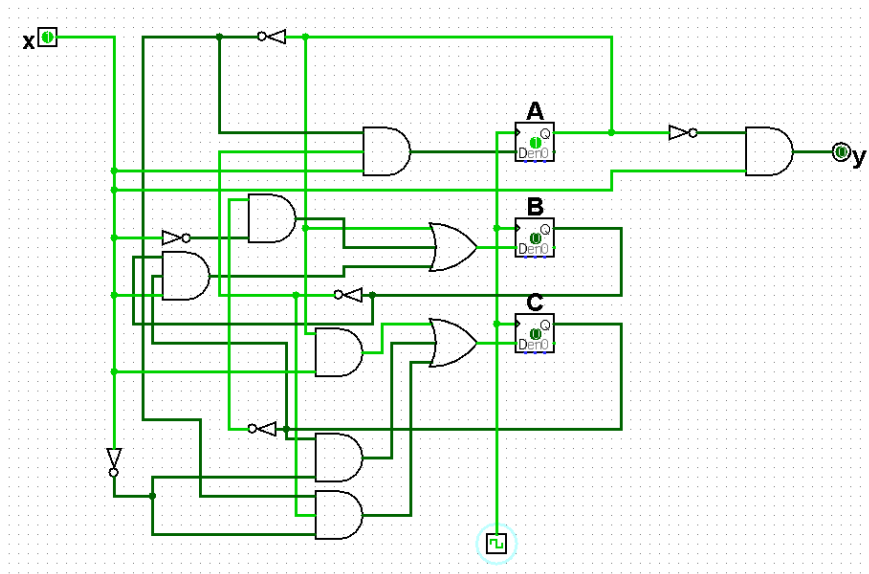
$$D_C = Ax + Cx' + A'B'x'$$

$$y = A'x$$

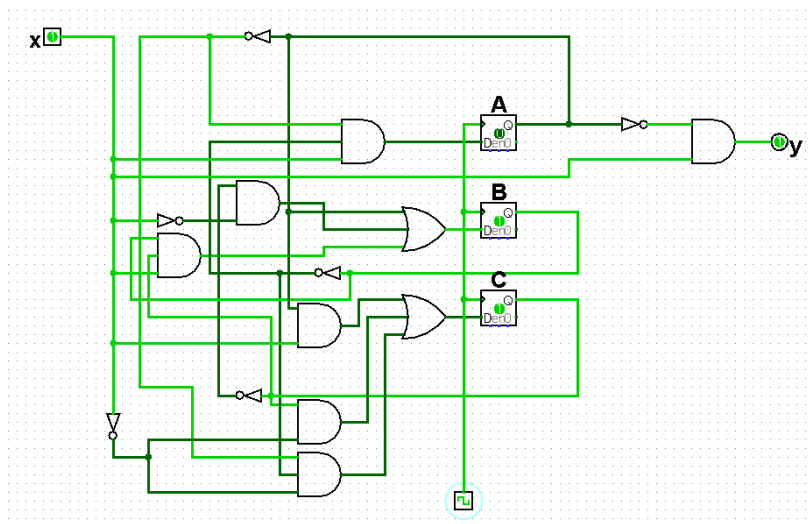
현재 상태			다음 상태			입력	출력	D flip-flop		
A	B	C	A	B	C	x_in	y_out	Da	Db	Dc
0	0	0	0	1	1	0	0	0	1	1
0	0	0	1	0	0	1	1	1	0	0
0	0	1	0	0	1	0	0	0	0	1
0	0	1	1	0	0	1	1	1	0	0
0	1	0	0	1	0	0	0	0	1	0
0	1	0	0	0	0	1	1	0	0	0
0	1	1	0	0	1	0	0	0	0	1
0	1	1	0	1	0	1	1	0	1	0
1	0	0	0	1	0	0	0	0	1	0
1	0	0	0	1	1	1	0	0	1	1



simulate... 확인 과정 : x=0, 001인 경우 y는 0



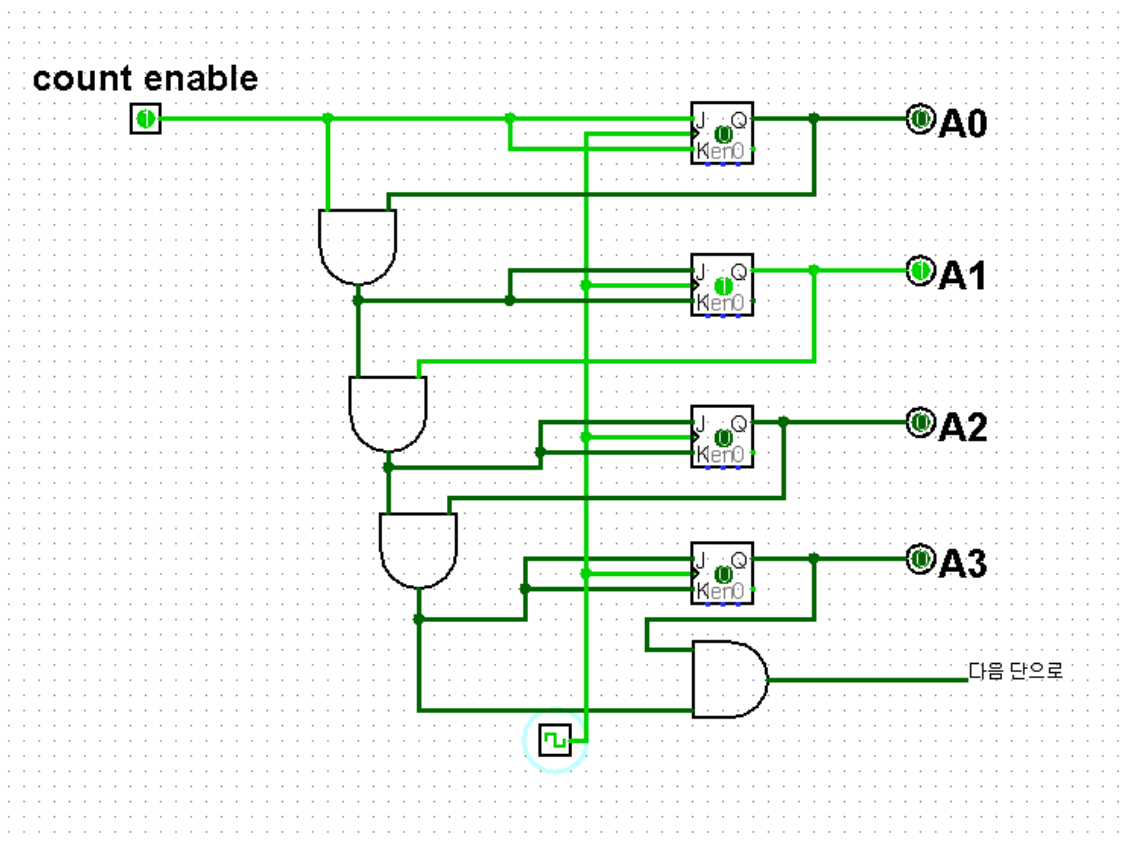
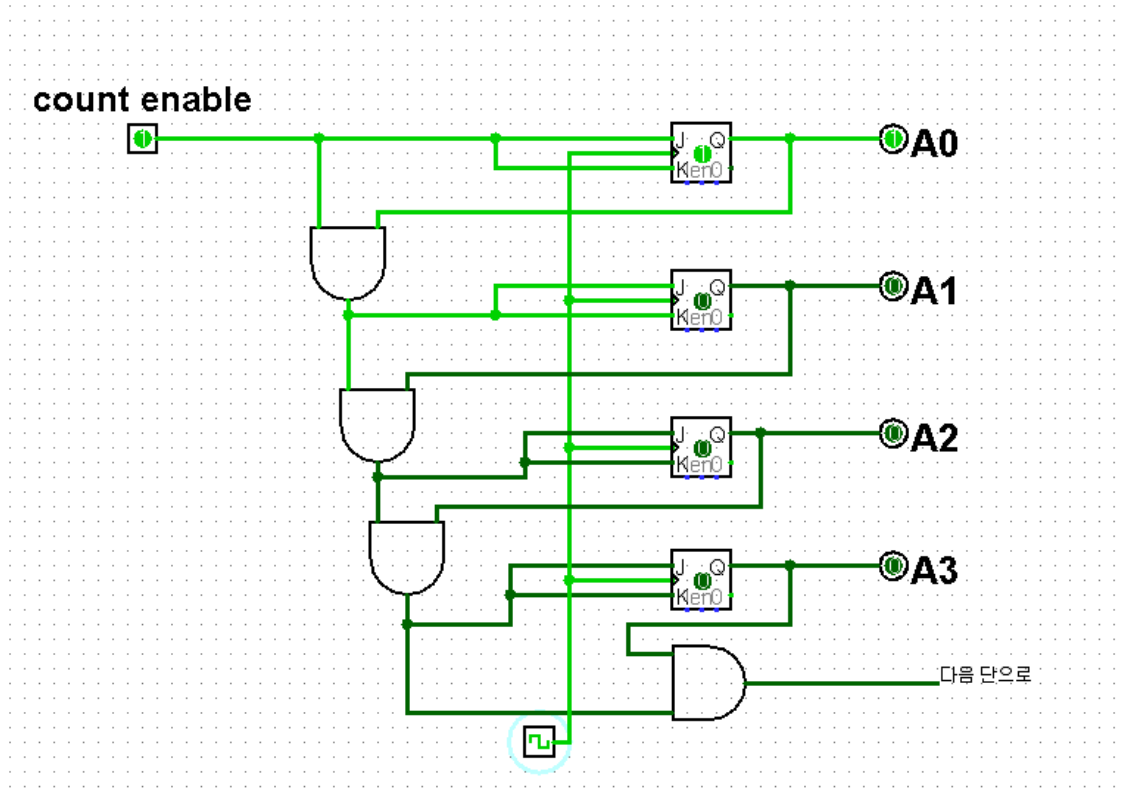
simulate... 확인 과정 : x=0, 100인 경우는 y는 0



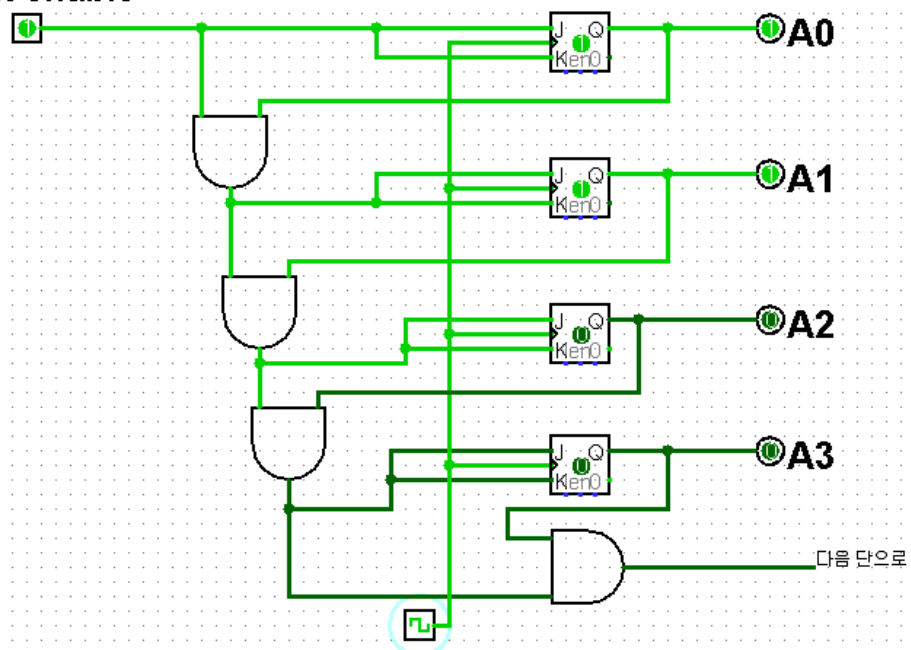
simulate... 확인 과정 : x=1, 011인 경우는 y는 1

캡처가 어려워 다 쓰지는 못했으나, 시뮬레이션 결과 다음 상태 역시 구한 상태표와 일치하는 것을 확인할 수 있었다.

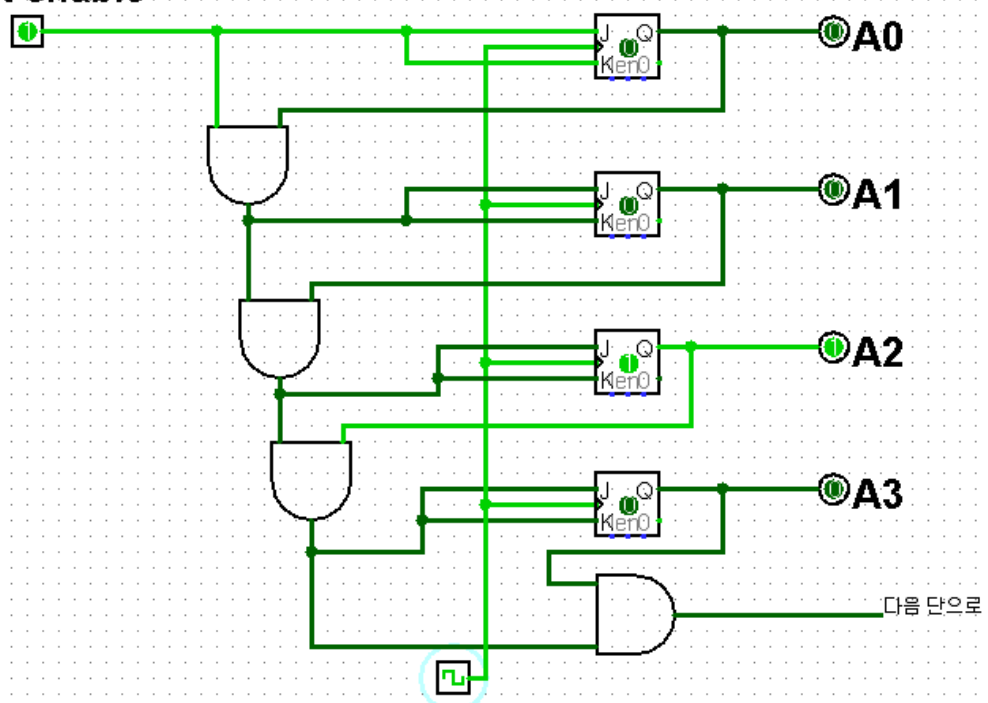
C - 3)



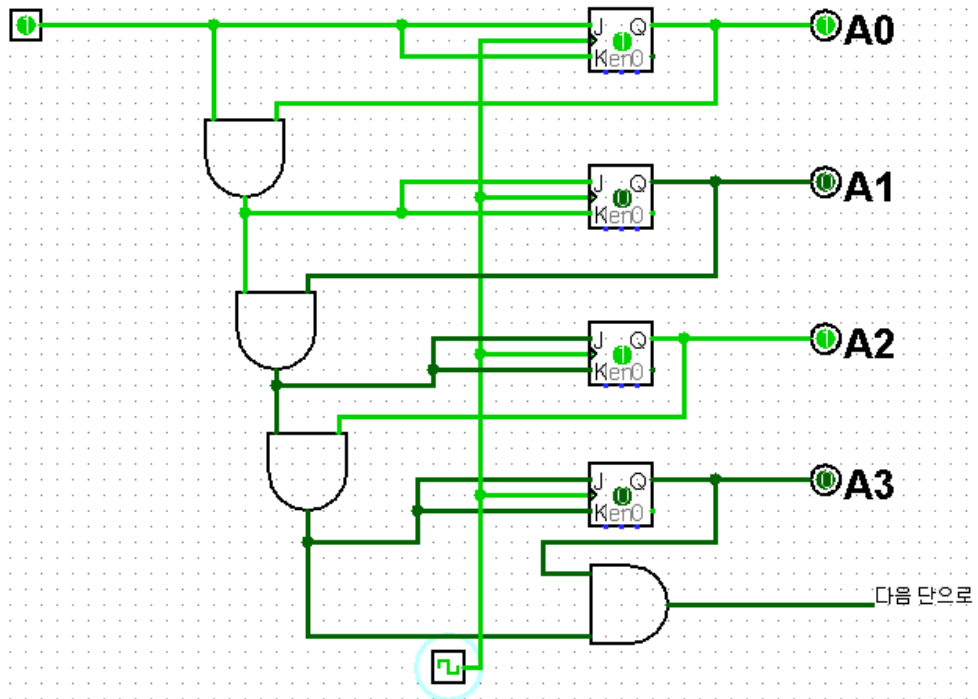
count enable



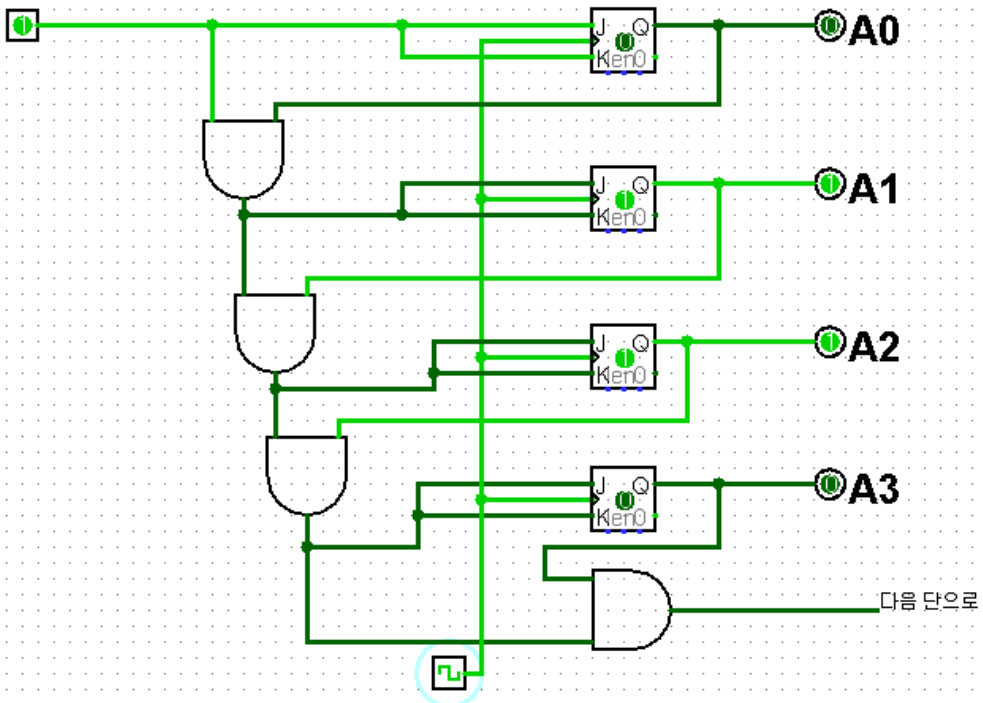
count enable



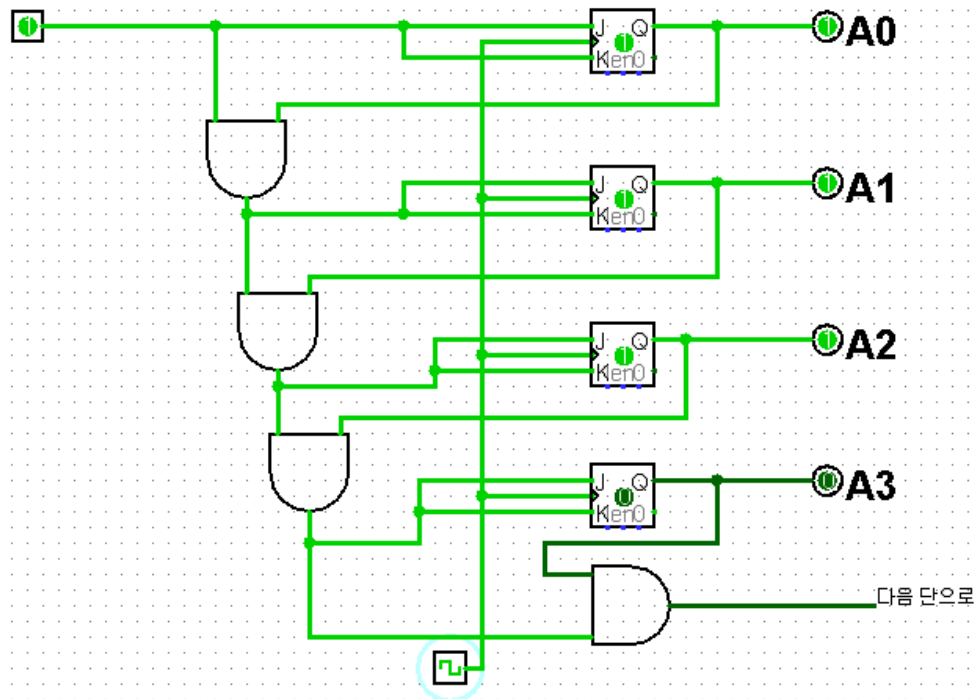
count enable



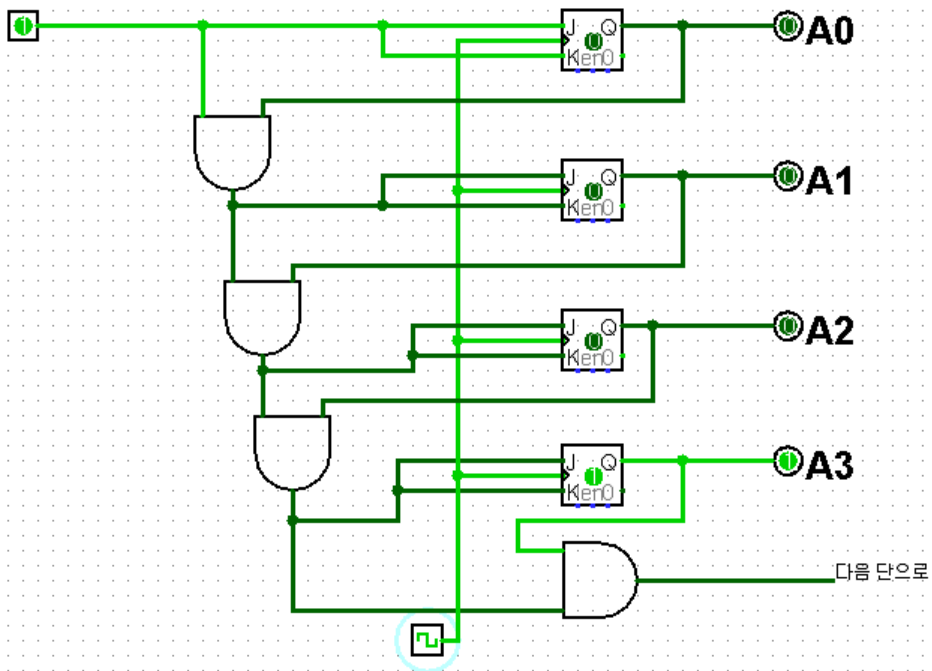
count enable



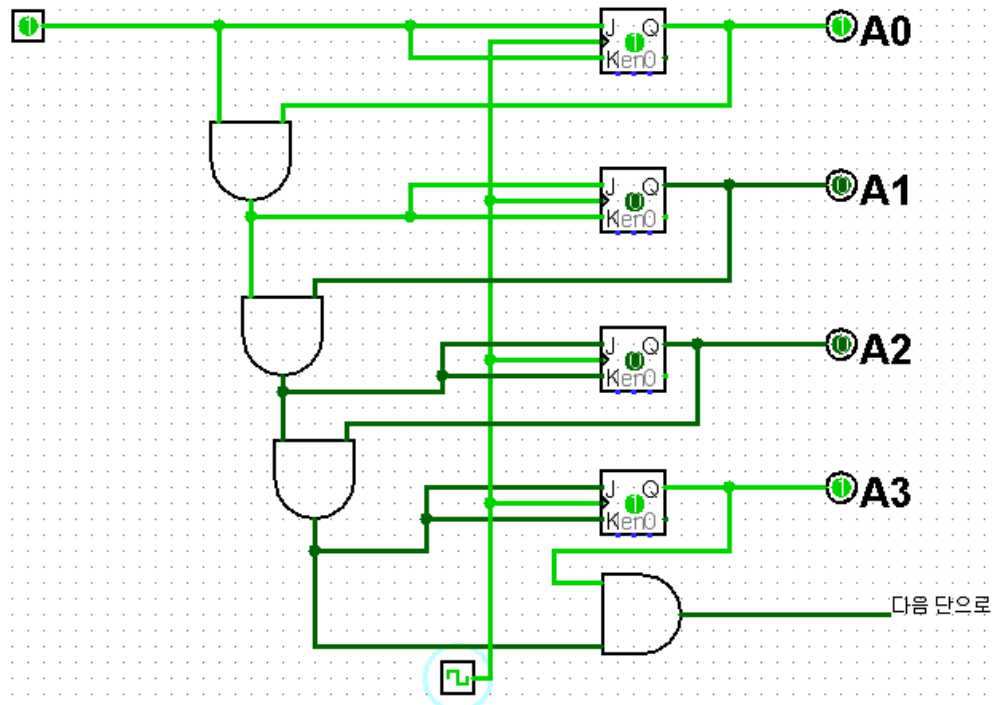
count enable



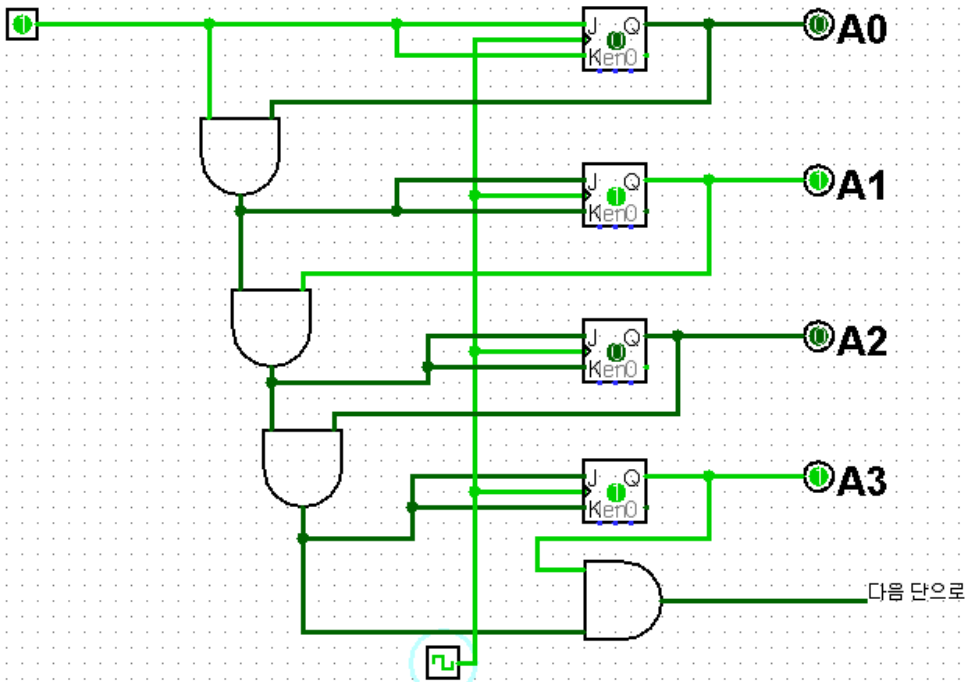
count enable



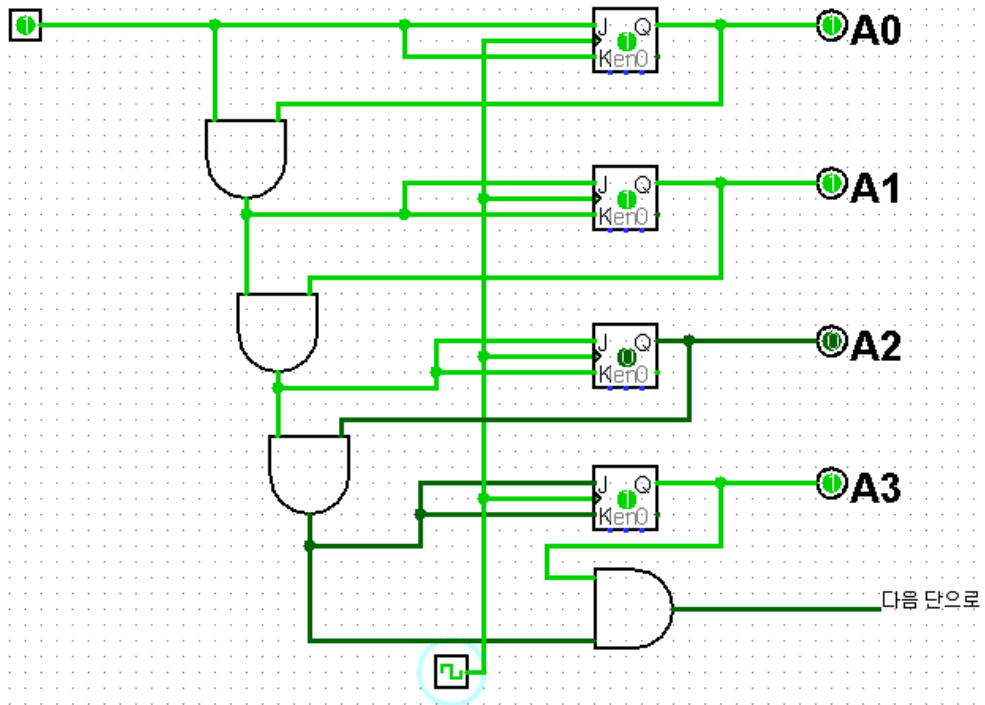
count enable



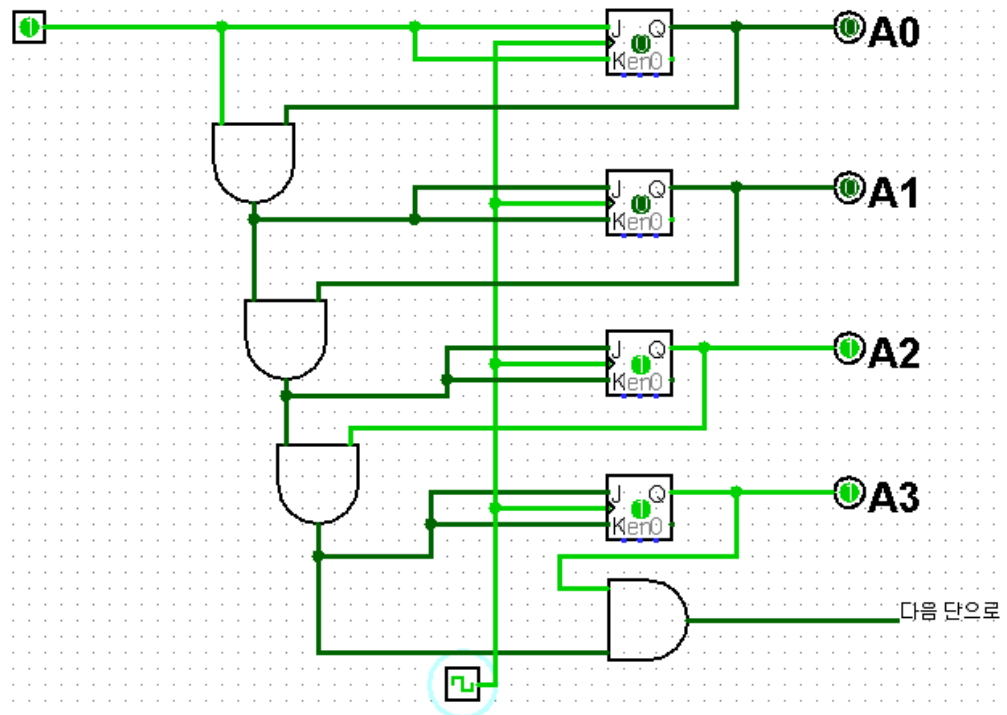
count enable



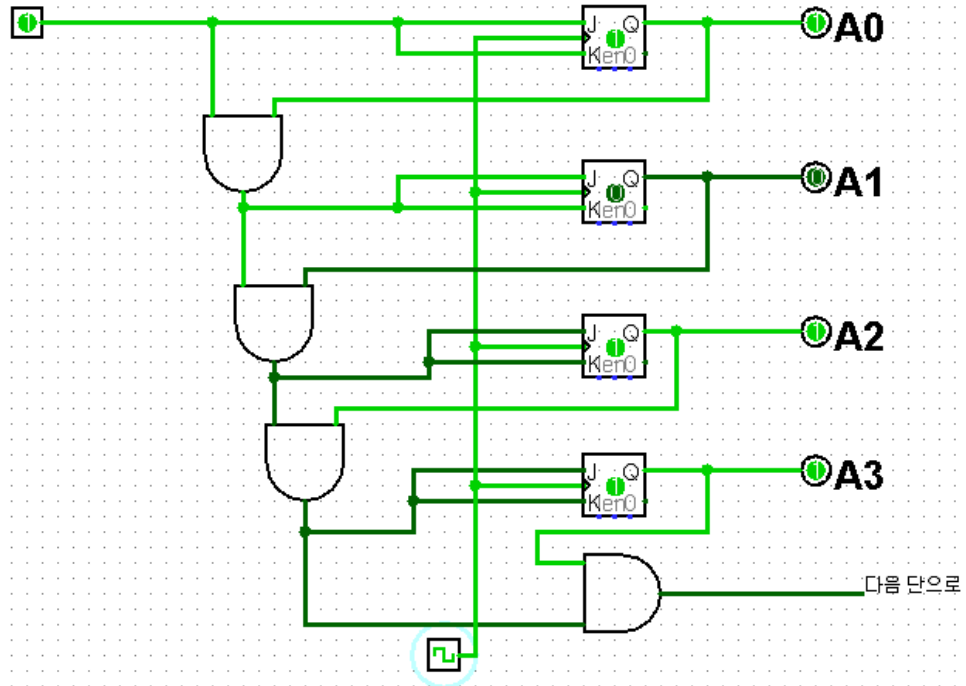
count enable



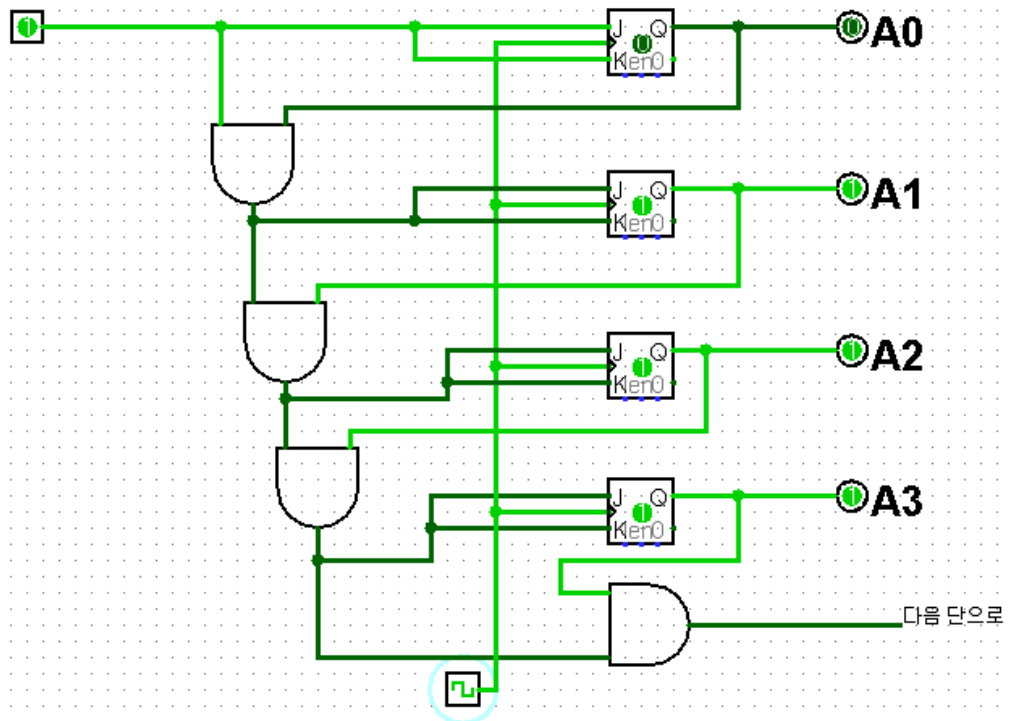
count enable



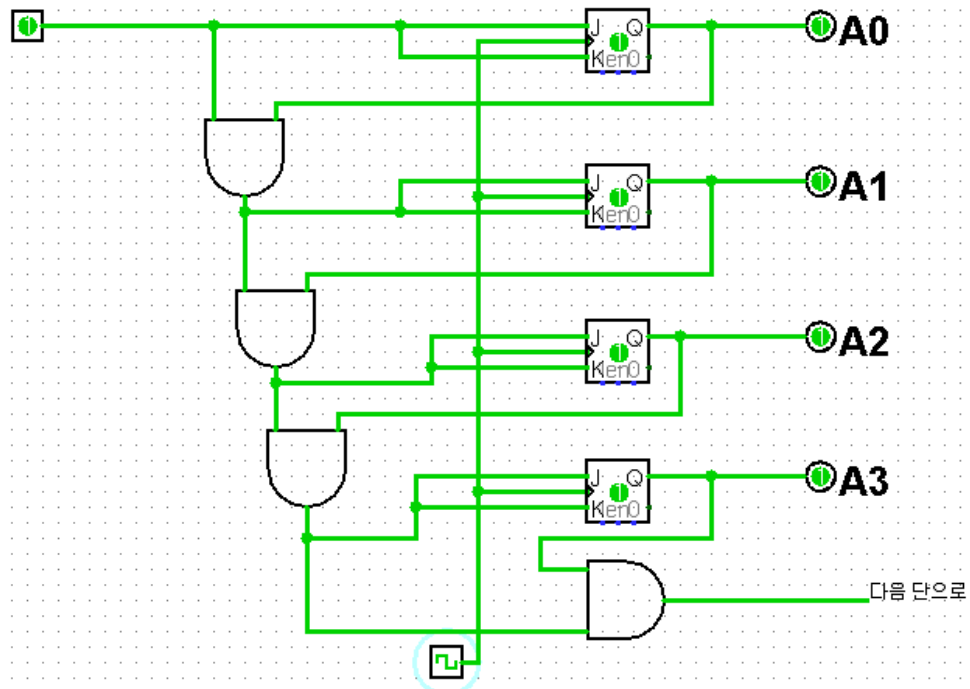
count enable



count enable



count enable



count enable

