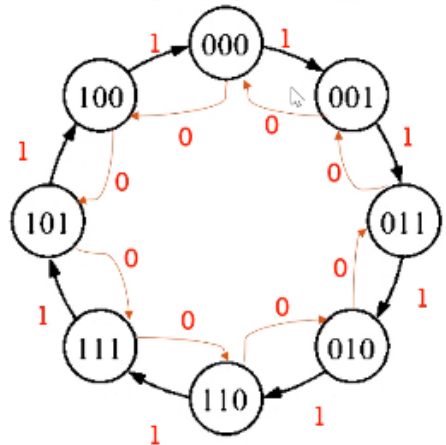


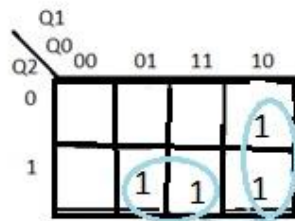
CONTADORES SÍNCRONOS DESCENDENTES Y ASCENDENTES/DESCENDENTES

Ejemplo de contador básico en
código Gray de 3 bits

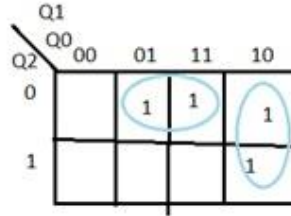


Entrada ascendente	Estado actual			Estado siguiente			D2	D1	D0
	Q ₂	Q ₁	Q ₀	Q ₂	Q ₁	Q ₀			
1	0	0	0	0	0	1	0	0	1
	0	0	1	0	1	1	0	1	1
	0	1	1	0	1	0	0	1	0
	0	1	0	1	1	0	1	1	0
	1	1	0	1	1	1	1	1	1
	1	1	1	1	0	1	1	0	1
	1	0	1	1	0	0	1	0	0
	1	0	0	0	0	0	0	0	0

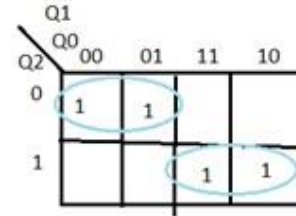
Entrada descendente	Estado actual			Estado siguiente			D2	D1	D0
	Q ₂	Q ₁	Q ₀	Q ₂	Q ₁	Q ₀			
0	0	0	0	1	0	0	1	0	0
	0	0	1	0	0	0	0	0	0
	0	1	1	0	0	1	0	0	1
	0	1	0	0	1	1	0	1	1
	1	1	0	0	1	0	0	1	0
	1	1	1	1	1	0	1	1	0
	1	0	1	1	1	1	1	1	1
	1	0	0	1	0	1	1	0	1



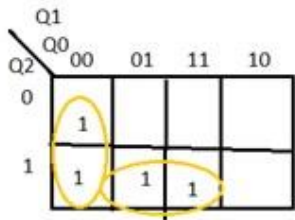
$$D2 = Q1Q0' + Q2Q0$$



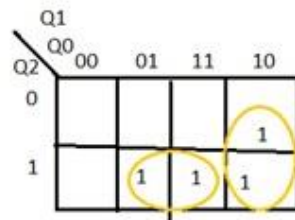
$$D1 = Q2'Q0 + Q1Q0'$$



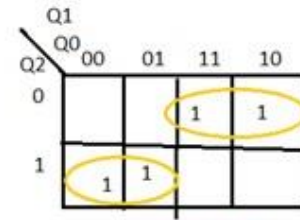
$$D0 = Q2'Q1' + Q2Q1$$



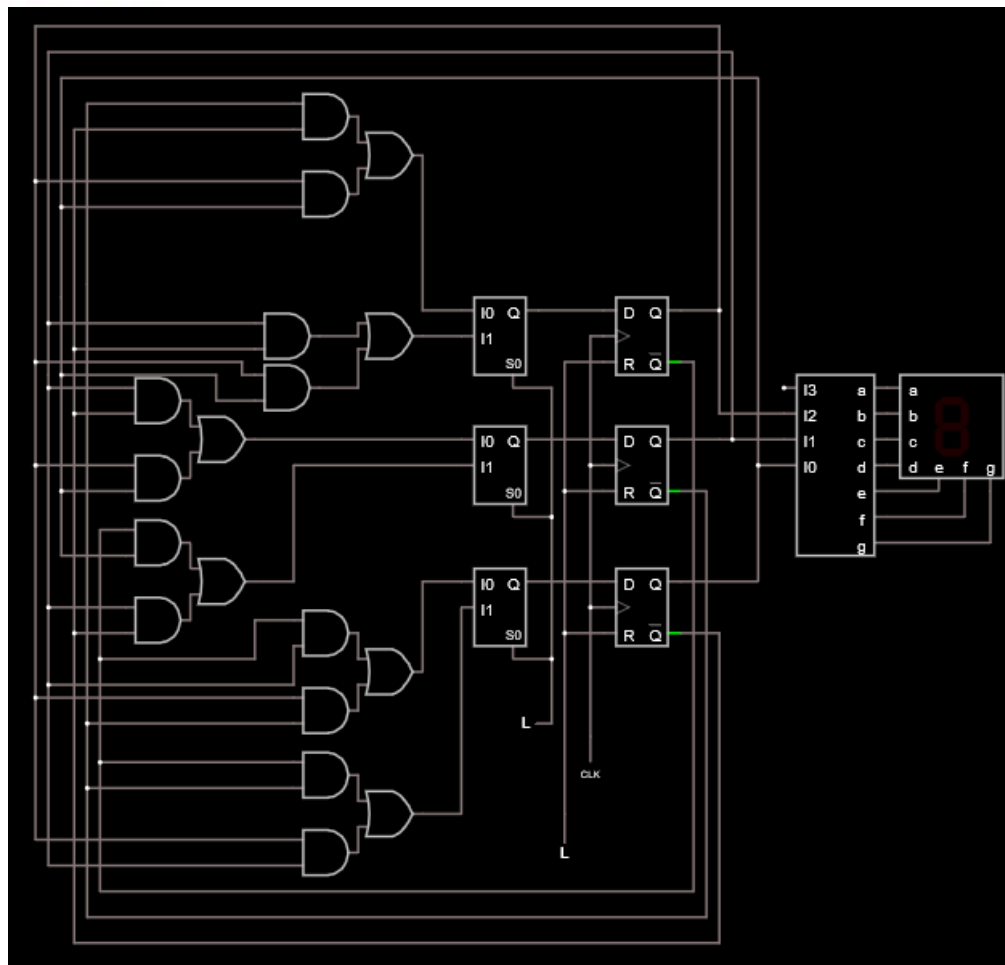
$$D2 = Q1'Q0' + Q2Q0$$



$$D1 = Q1Q0' + Q2Q0$$



$$D0 = Q2'Q1 + Q2Q1'$$



Link: <https://tinyurl.com/yjd6xxu8>