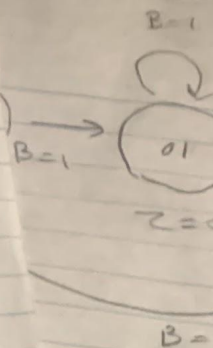
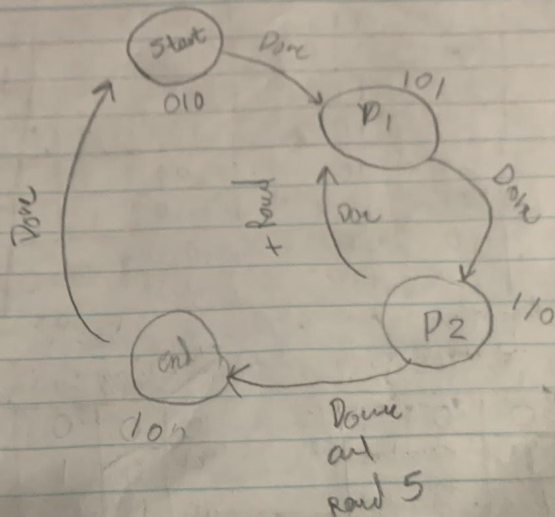


Q₂ Q₁ Q₀ 11 10

Start



Q₂ Q₁ Q₀

0
1
0
1
0

Q ₂ Q ₁ Q ₀	DRS	Q ₂ [*] Q ₁ [*] Q ₀ [*]	D ₂ D ₁ D ₀	Z ₂ Z ₁ Z ₀	Color
000	00	010	010	000	black
	01	010	010		
	10	010	010		
	11	010	010		

010	00	010	010	010	gray
	01	010	010		
	10	101	101		
	11	101	101		

101	00	101	101	101	purple
	01	101	101		
	10	110	110		
	11	110	110		

$Q_2 Q_1 Q_0$	$D R S$	$Q_2^* Q_1^* Q_0^*$	$D_2 D_1 D_0$	$Z_2 Z_1 Z_0$	Color
110	00	110	110	110	Yellow
	01	110	110		
	10	101	101		
	11	100	100		
100	00	100	100	100	Red
	01	100	100		
	10	100	100		
	11	100	100		

$R S$
0 0

$Q_2 Q_1$	D	00	01	11	10
00	0	0	0	0	0
01	0	0	1	0	0
11	1	1	1	0	0
10	1	1	1	1	1

$R S$
0 1

$Q_2 Q_1$	D	00	01	11	10
00	0	0	0	0	0
01	0	0	1	0	0
11	1	1	1	0	0
10	1	1	1	1	1

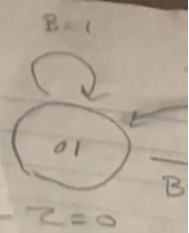
$R S$
1 0

$Q_2 Q_1$	D	00	01	11	10
00	0	0	0	0	0
01	0	0	0	0	0
11	0	0	0	0	0
10	0	0	0	0	0

$R S$
1 1

$Q_2 Q_1$	D	00	01	11	10
00	0	0	0	0	0
01	0	0	0	0	0
11	0	0	0	0	0
10	0	0	0	0	0

$$D_2' = Q_1 \bar{Q}_0 \bar{D} \bar{R} + Q_2 \bar{Q}_0 \bar{R} + Q_2 \bar{Q}_1 \bar{R} + Q_2 \bar{Q}_1 \bar{Q}_0 \bar{R}$$



$B=0$

D_1
0
0
1
0
0
0
0

R R S
0 0

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	1	1	X	X
01	1	0	X	X
11	1	0	X	X
10	0	0	1	0

D₁

1 0

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	1	1	1	1
01	1	1	1	1
11	1	1	1	1
10	1	1	1	1

R R S
0 1

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	1	1	X	X
01	1	0	X	X
11	1	0	X	X
10	0	0	1	0

1 1

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	1	1	1	1
01	1	1	1	1
11	1	1	1	1
10	1	1	1	1

$$D_1 = \bar{Q}_2 \bar{Q}_1 \bar{Q}_0 \bar{R} + Q_1 \bar{Q}_0 \bar{D} \bar{R} + Q_2 \bar{Q}_1 Q_0 \bar{D} \bar{R} + R$$

0 0

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	0	0	X	X
01	0	1	X	X
11	0	1	X	X
10	0	0	0	1

0 1

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	0	0	X	X
01	0	1	X	X
11	0	0	X	X
10	0	0	0	1

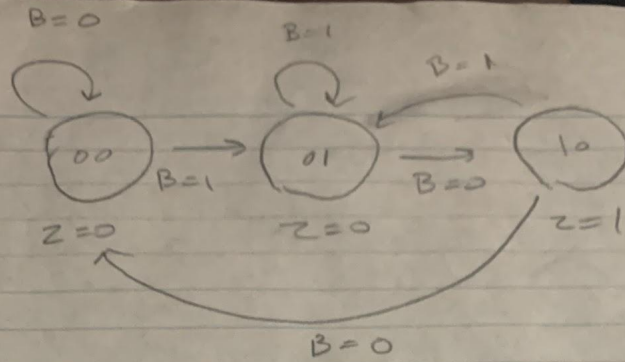
1 0

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	0	0
10	0	0	0	0

1 1

Q ₂ Q ₁ \ Q ₀ D	00	01	11	10
00	0	0	0	0
01	0	0	0	0
10	0	0	0	0
11	0	0	0	0

$$D_0 = \bar{Q}_2 \bar{Q}_1 \bar{Q}_0 \bar{D} \bar{R} + Q_1 \bar{Q}_0 \bar{D} \bar{R} \bar{R} S + Q_2 \bar{Q}_1 Q_0 \bar{D} \bar{R}$$



$Q_1 Q_0 B$	$Q_1^+ Q_0^+$	$D_1 D_0$	Z
0 0 0	0 0	0 0	0
0 0 1	0 1	0 1	0
0 1 0	1 0	1 0	0
0 1 1	0 1	0 1	0
1 0 0	0 0	0 0	1
1 0 1	0 1	0 1	1
1 1 0	0 0	0 0	0
1 1 1	0 0	0 0	0

$D_1 \backslash Q_1 Q_0 B$	00	01	11	10
0	0	0	0	1
1	0	0	0	0

$$D_1 = \overline{Q_1} Q_0 \overline{B}$$

$D_0 \backslash Q_1 Q_0 B$	00	01	11	10
0		1	1	
1		1		

$$D_0 = \overline{Q_0} B + Q_1 B$$

$Z \backslash Q_1 Q_0 B$	00	01	11	10
0				
1	1	1		

$$Z = Q_1 \overline{Q_0}$$

$Q_2 Q_1 Q_0$	T	Q_2^+	Q_1^+	Q_0^+	D_2	D_1	D_0	Z
000	0	0	0	0	0	0	0	0
001	1	0	0	1	0	0	1	1
010	0	0	0	1	0	0	1	0
011	1	0	1	0	0	1	0	1
100	0	0	1	0	0	1	0	0
101	1	0	1	1	0	1	1	1
110	0	0	1	1	0	1	1	0
111	1	1	0	0	1	0	0	1
100	0	1	0	0	1	0	0	0
	1	1	0	1	1	0	1	1
101	0	1	0	1	1	0	1	0
	1	1	1	0	1	1	0	1
110	0	1	1	0	1	1	0	0
	1	0	0	1	0	0	1	1
111	0	X	X	X	X	X	X	X
	1	1	1	0	1	1	0	1

$Q_2 Q_1$	$Q_0 T$	00	01	11	10
00		1	1		
01		1	1		1
11		1	1		
10		1	X		

$$T$$

$$\overline{Q_2} T + Q_2 Q_1 T +$$

$$Q_2 \overline{Q_0} T$$