00 - standby

01 - första riktig

10 - andre riktig

11 - tredje riktig -> låst opp LED lyser

KODE: 4 3 2

000,001,010,011,101,110,111/0

001,010,101,110,111/0

100/0

000,100/0

011/0

000,001,100,101,110,111/0

010/1

000,011/0

000,001,010,011,100,101,110,111/0

00

01

10

11
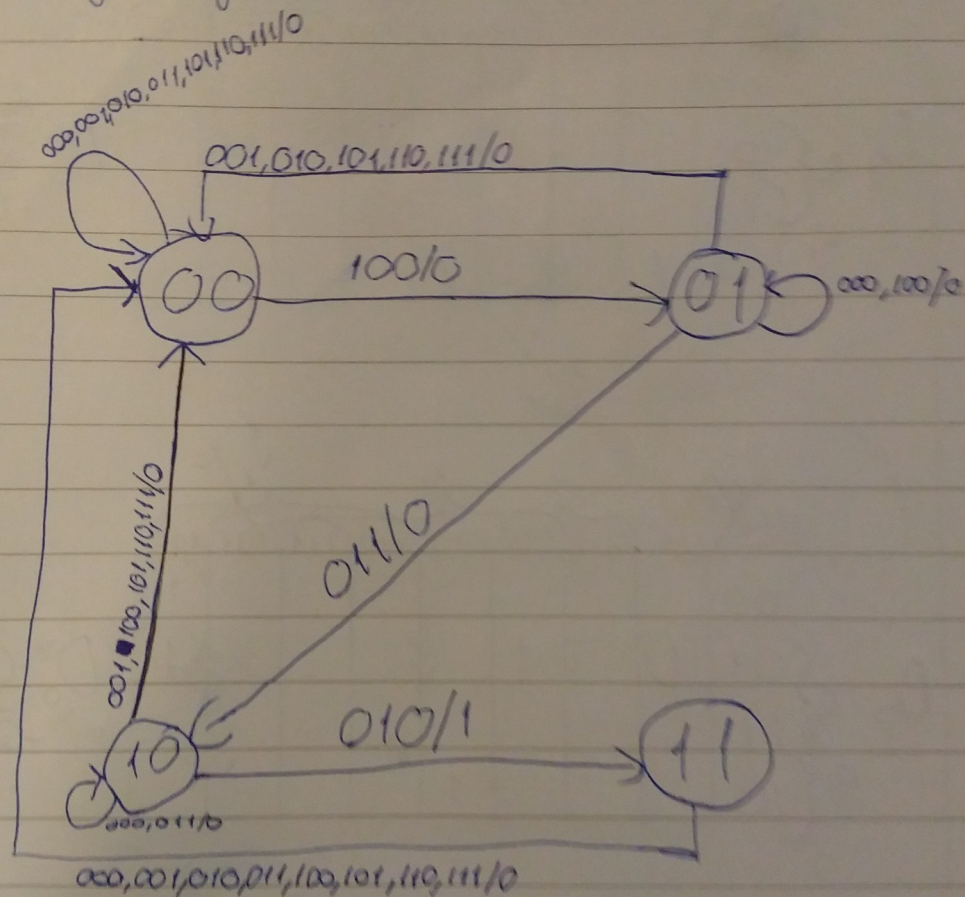
KODE: 432

Q_1 Q_0	$X_2 X_1 X_0$	$D_1 D_0$	Out
0 0	0 0 0	0 0	0
0 0	0 0 1	0 0	0
0 0	0 1 0	0 0	0
0 0	0 1 1	0 0	0
0 0	1 0 0	0 1	0
0 0	1 0 1	0 0	0
0 0	1 1 1	0 0	0
0 1	0 0 0	0 1	0
0 1	0 0 1	0 0	0
0 1	0 1 0	0 0	0
0 1	0 1 1	1 1	0
0 1	1 0 0	0 1	0
0 1	1 0 1	0 0	0
0 1	1 1 0	0 0	0
0 1	1 1 1	0 0	0
1 0	0 0 0	1 0	0
1 0	0 0 1	0 0	0
1 0	0 1 0	1 1	1
1 0	0 1 1	1 0	0
1 0	1 0 0	0 0	0
1 0	1 0 1	0 0	0
1 0	1 1 0	0 0	0
1 0	1 1 1	0 0	0
1 1	0 0 0	0 0	0
1 1	0 0 1	0 0	0
1 1	0 1 0	0 0	0
1 1	0 1 1	0 0	0
1 1	1 0 0	0 0	0

$Q_1 Q_0$	$X_2 X_1 X_0$	$D_1 D_0$	Out
1 1	1 0 1	0 0	0
1 1	1 1 0	0 0	0
1 1	1 1 1	0 0	0

$$D_1 = \bar{Q}_1 Q_0 \bar{X}_2 X_1 X_0 + Q_1 \bar{Q}_0 \bar{X}_2 \bar{X}_1 \bar{X}_0 + Q_1 \bar{Q}_0 X_2 \bar{X}_1 \bar{X}_0 + Q_1 \bar{Q}_0 \bar{X}_2 X_1 X_0$$

$$D_0 = \bar{Q}_1 \bar{Q}_0 X_2 \bar{X}_1 \bar{X}_0 + \bar{Q}_1 Q_0 \bar{X}_2 \bar{X}_1 \bar{X}_0 + \bar{Q}_1 Q_0 \bar{X}_2 X_1 X_0 + \bar{Q}_1 Q_0 X_2 \bar{X}_1 \bar{X}_0 + Q_1 \bar{Q}_0 \bar{X}_2 X_1 \bar{X}_0$$

$$Out = Q_1 \bar{Q}_0 \bar{X}_2 X_1 \bar{X}_0$$

D_1

Q_1Q_0 \ $X_2X_1X_0$	000	001	011	010	110	111	101	100
00								
01			1					
11								
10	1		1	1				

$$D_1 = Q_1 \bar{Q_0} X_1 \bar{X_2} + \bar{Q_1} Q_0 \bar{X_2} X_1 X_0 + Q_1 Q_0 X_2 X_1 X_0$$

D_0

Q_1Q_0 \ $X_2X_1X_0$	000	001	011	010	110	111	101	100
00								1
01	1		1					1
11								
10				1				

$$D_0 = \bar{Q_1} X_2 \bar{X_1} \bar{X_0} + \bar{Q_1} Q_0 \bar{X_1} \bar{X_0} + \bar{Q_1} Q_0 \bar{X_2} X_1 X_0 + Q_1 \bar{Q_0} \bar{X_2} X_1 \bar{X_0}$$