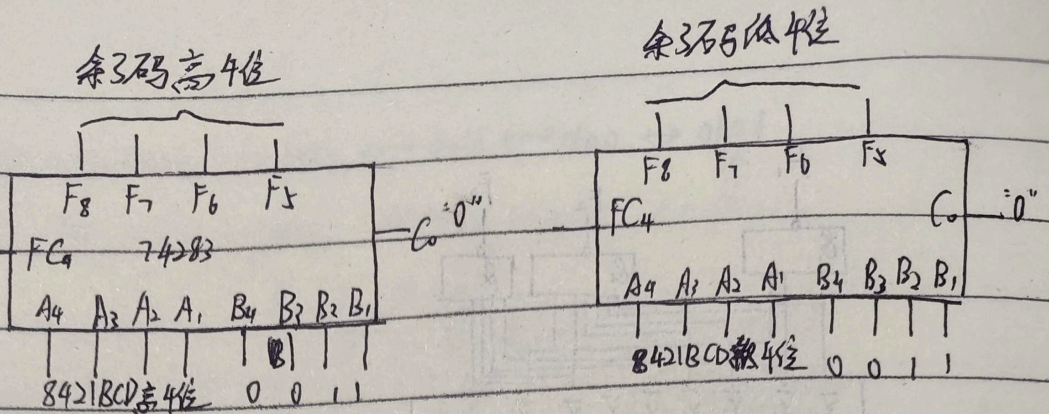
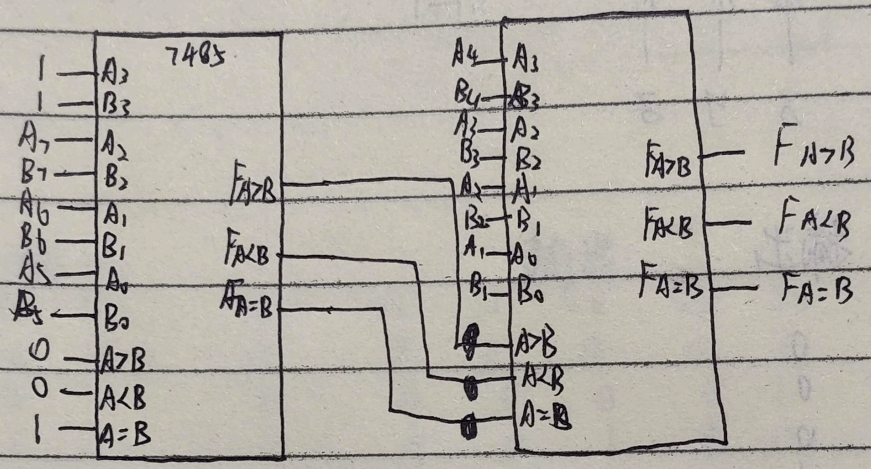
6.1



6.2

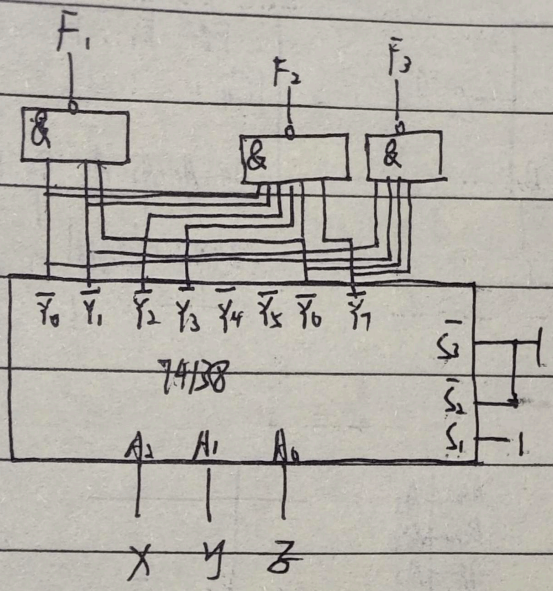


6.3 列出真值表

输入			输出		
X	Y	Z	F_1	F_2	F_3
0	0	0	1	1	1
0	0	1	1	1	1
0	1	0	0	1	0
0	1	1	0	1	0
1	0	0	0	0	0
1	0	1	0	0	0
1	1	0	1	1	1
1	1	1	0	1	1

$F_1 = \sum m(0,1,6)$ $F_2 = \sum m(0,1,2,3,6,7)$ $F_3 = \sum m(0,1,6,7)$

日期： 年 月 日



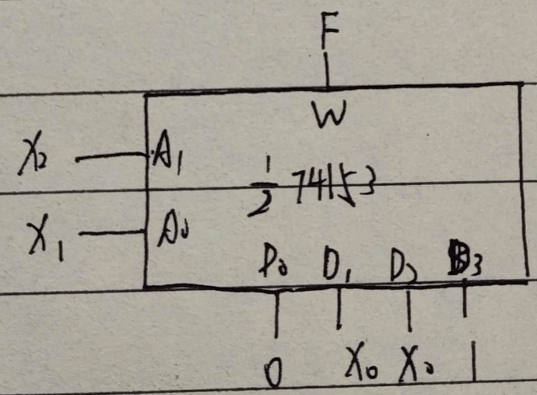
6.4(2)

输入			输出
X_2	X_1	X_0	
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	1

$F = \sum m(3,5,6,7)$

$$F = \bar{X}_2 X_1 X_0 + X_2 \bar{X}_1 X_0 + X_2 X_1 \bar{X}_0 + X_2 X_1 X_0$$

$$= \bar{X}_2 \bar{X}_1 \cdot 0 + \bar{X}_2 X_1 X_0 + X_2 \bar{X}_1 \cdot X_0 + X_2 X_1 \cdot 1$$

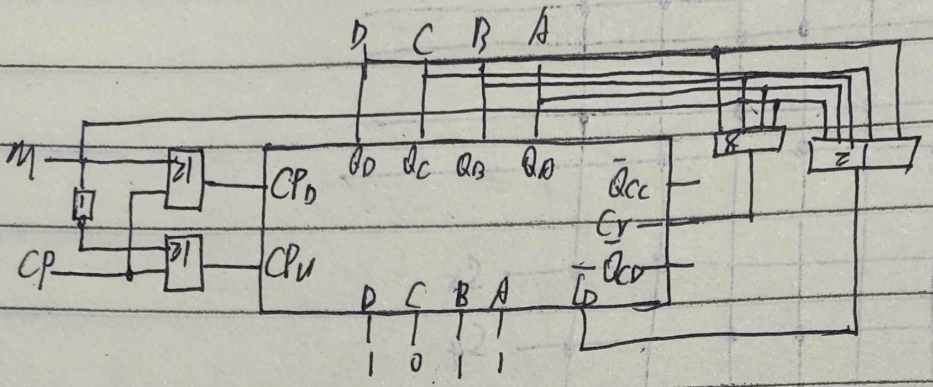


6.5 假设初始状态为0000

日期： 年 月 日

0000 ↔ 0001 ↔ 0010 ↔ 0011 ↔ 0100 ↔ 0101

1011 ↔ 1010 ↔ 1001 ↔ 1000 ↔ 0111 ↔ 0110



6.8.

输入			输出					
X_2	X_1	X_0	S_5	S_4	S_3	S_2	S_1	S_0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1
0	1	0	0	0	0	1	0	0
0	1	1	0	0	1	0	0	1
1	0	0	0	1	0	0	0	0
1	0	1	0	1	0	0	0	1
1	1	0	1	0	0	1	0	0
1	1	1	1	1	0	0	0	1

$S_5 = X_2X_1\bar{X}_0 + X_2X_1X_0 = \Sigma m(6,7)$

$S_4 = X_2\bar{X}_1\bar{X}_0 + X_2\bar{X}_1X_0 + X_2X_1X_0 = \Sigma m(4,5,7)$

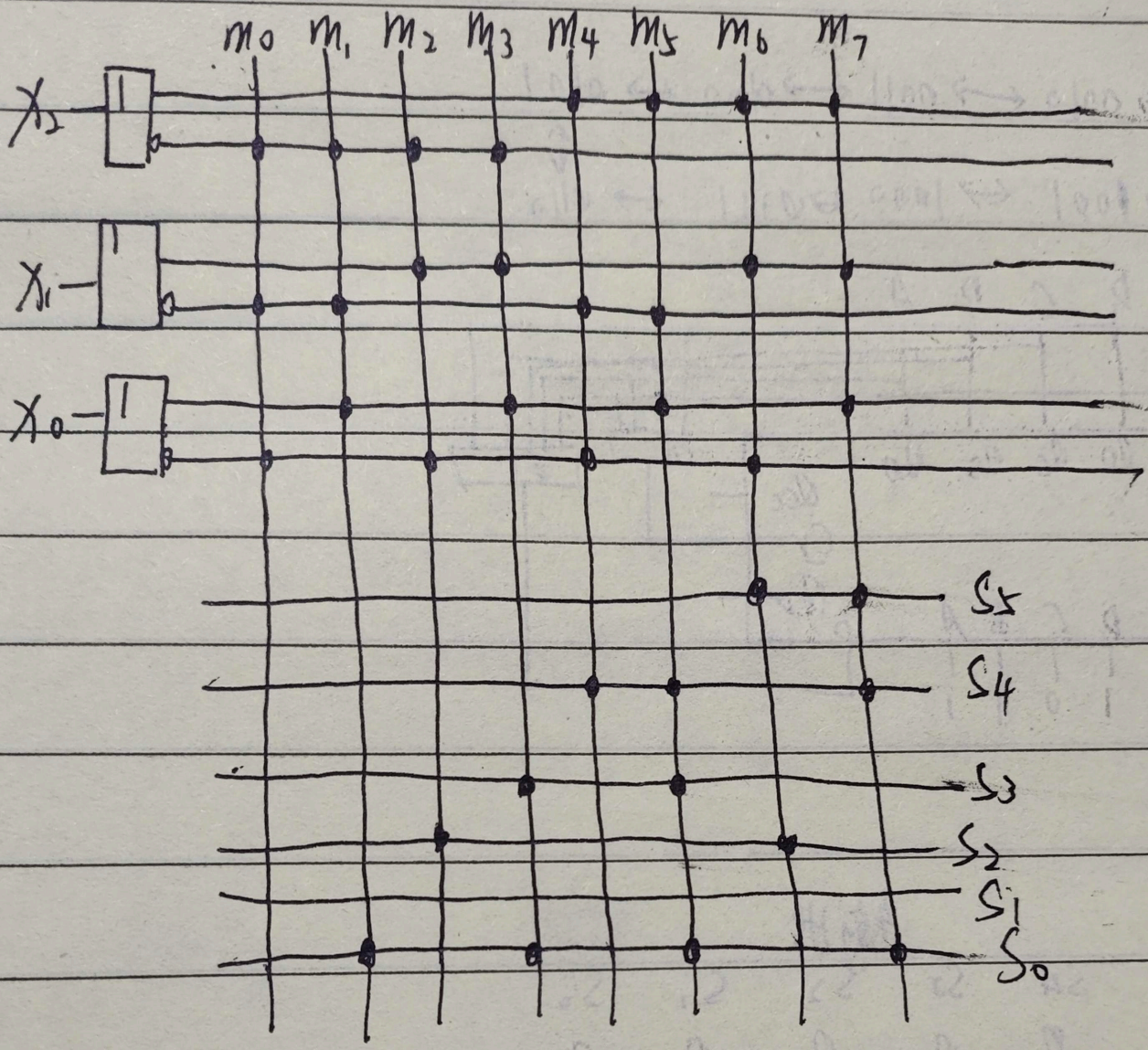
$S_3 = \bar{X}_2X_1X_0 + X_2\bar{X}_1X_0 = \Sigma m(3,5)$

$S_2 = \bar{X}_2X_1\bar{X}_0 + X_2X_1\bar{X}_0 = \Sigma m(2,6)$

$S_1 = 0$

$S_0 = \bar{X}_2\bar{X}_1X_0 + \bar{X}_2X_1X_0 + X_2\bar{X}_1X_0 + X_2X_1X_0 = \Sigma m(1,3,5,7)$

日期： 年 月 日


m0 m1 m2 m3 m4 m5 m6 m7
X2
X1
X0
S7
S4
S3
S2
S1
S0