



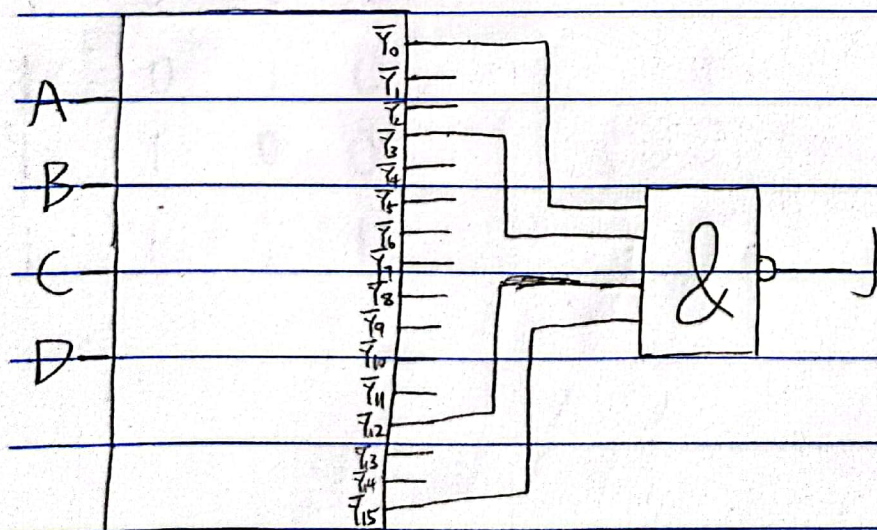
### 习题 1.5

1.5 设ABCD为一位十进制数2421码，J为奇偶校验位

A	B	C	D	J	A	B	C	D	J
0	0	0	0	1	1	0	0	0	d
0	0	0	1	0	1	0	0	1	d
0	0	1	0	0	1	0	1	0	d
0	0	1	1	1	1	0	1	1	0
0	1	0	0	0	1	1	0	0	1
0	1	0	1	d	1	1	0	1	0
0	1	1	0	d	1	1	1	0	0
0	1	1	1	d	1	1	1	1	1

$$\therefore F = m_0 + m_3 + m_{12} + m_{15}$$

$$= \overline{m_0} \cdot \overline{m_3} \cdot \overline{m_{12}} \cdot \overline{m_{15}}$$







7.6  $\bar{I}_0, \bar{I}_4, \bar{I}_6, \bar{I}_7$  为 1,  $\bar{I}_1, \bar{I}_2, \bar{I}_3, \bar{I}_5$  为 0

$\bar{I}_5$  优先级高, 故输出为 0/0

7.8

$$Y = \bar{A}\bar{B}D_0 + \bar{A}B\bar{D}_1 + A\bar{B}D_2 + AB\bar{D}_3$$

$$= \bar{A}\bar{B}C + ABC$$

A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

由真值表可知, 该电路的功能为判断 A、B、C 是否相同, 相同输出 1, 不同输出 0

