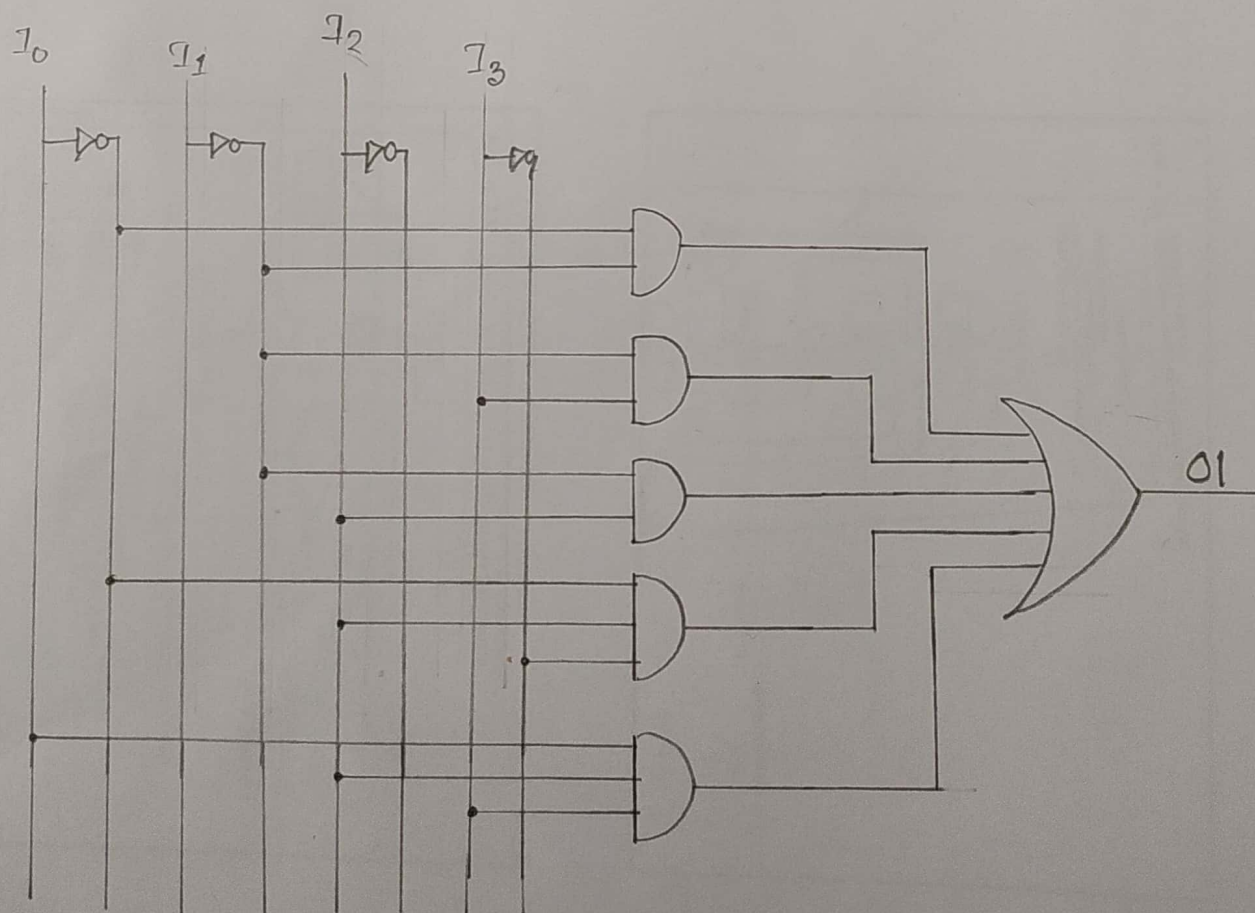


For 01:

$I_2 I_3$	00	01	11	10
$I_0 I_1$				
00	1	1	1	1
01	0	0	0	1
11	0	0	1	0
10	0	1	1	1

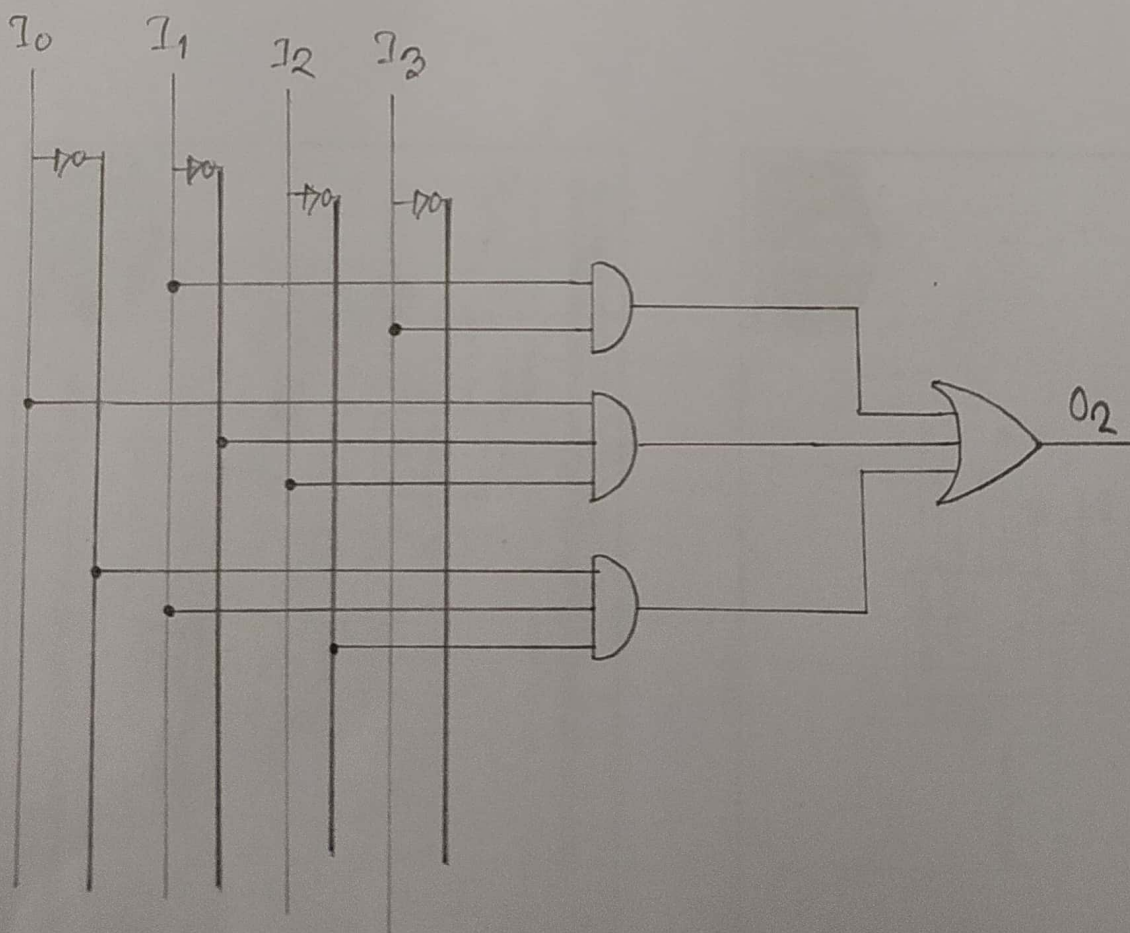
$$O_1 = \bar{I}_0 \bar{I}_1 + \bar{I}_1 I_3 + \bar{I}_1 I_2 + I_0 I_2 \bar{I}_3 + I_0 I_2 I_3$$



Forc 02

$I_2 I_3$	00	01	11	10
$I_0 I_1$				
00	0	0	0	0
01	1	1	1	0
11	0	1	1	0
10	0	0	1	1

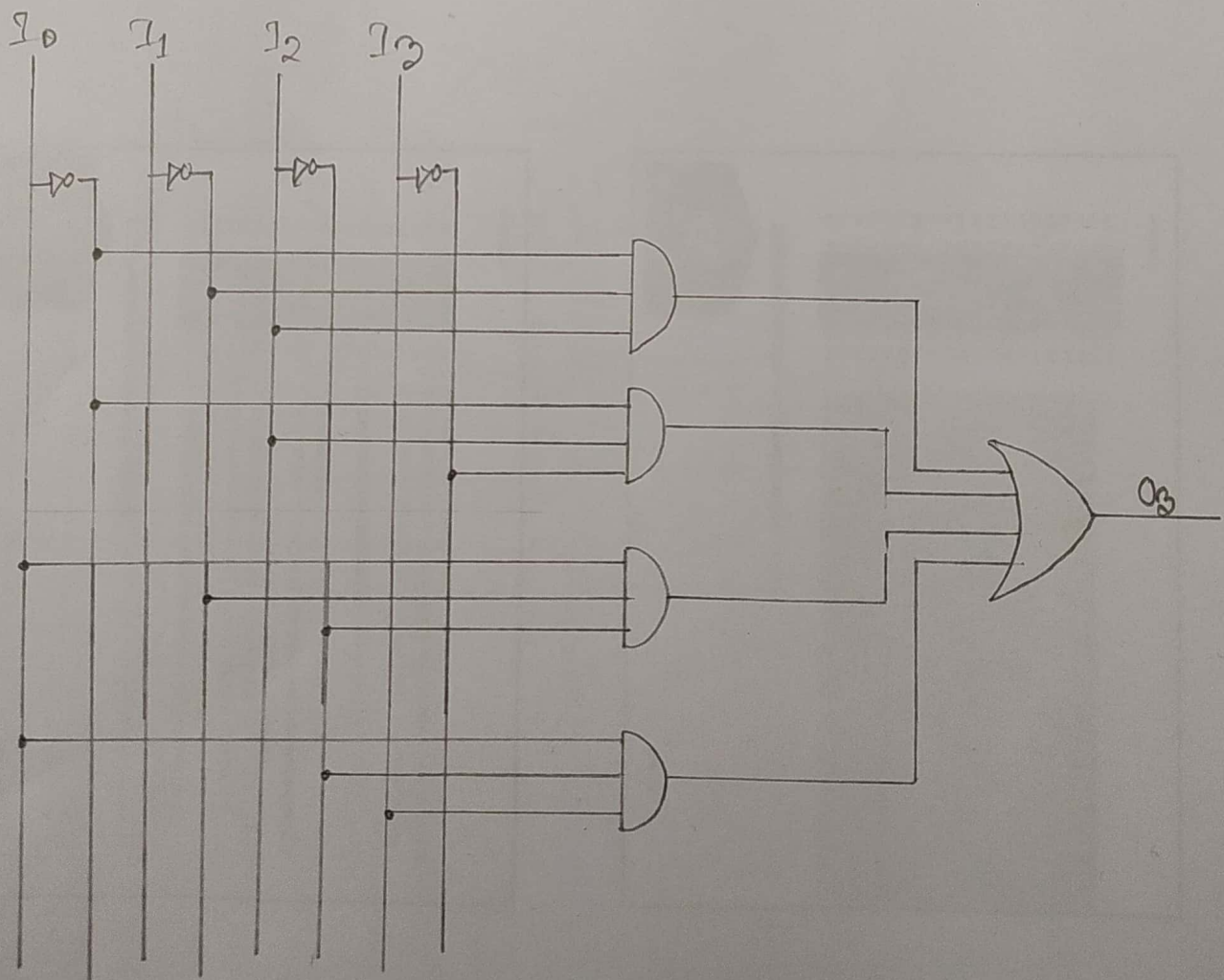
$$O_2 = I_1 I_3 + I_0 \bar{I}_1 I_2 + \bar{I}_0 I_1 \bar{I}_2$$



For O_3

$I_2 I_3$	00	01	11	10
$I_0 I_1$				
00	0	0	1	1
01	0	0	0	1
11	0	1	0	0
10	1	1	0	0

$$O_3: \bar{I}_0 \bar{I}_1 I_2 + \bar{I}_0 I_2 \bar{I}_3 + I_0 \bar{I}_1 \bar{I}_2 + I_0 \bar{I}_2 I_3$$



For O_4 :

$I_2 I_3$	$I_0 I_1$	00	01	11	10
00		1	0	1	1
01		1	0	1	1
11		0	1	0	0
10		1	1	0	1

$$\underline{O_4}: \bar{I}_0 \bar{I}_3 + \bar{I}_1 \bar{I}_3 + \bar{I}_0 I_2 + I_0 \bar{I}_2 I_3$$

