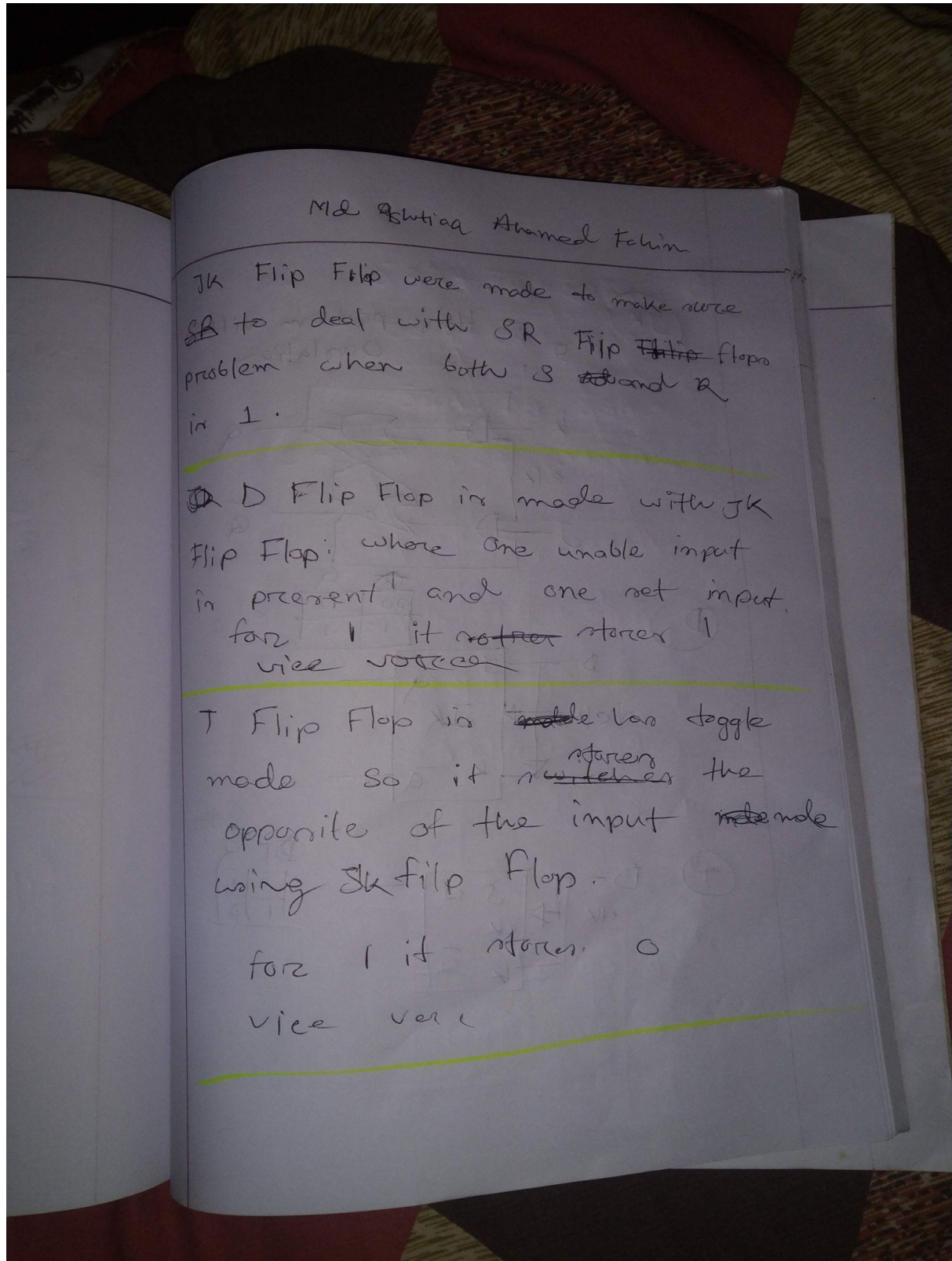


Md. Ishtiaq Ahamed Fahim
2012518642
Final

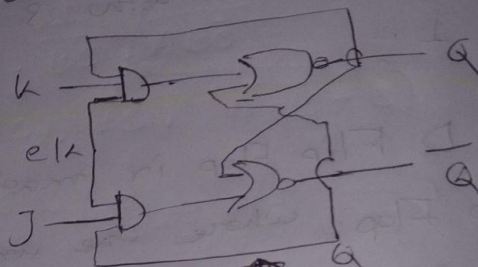
1:



2:

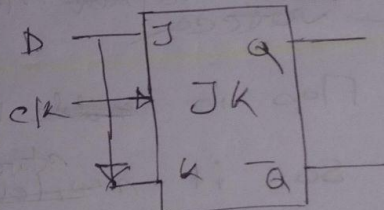
(JK)

Have problem with
Quotation



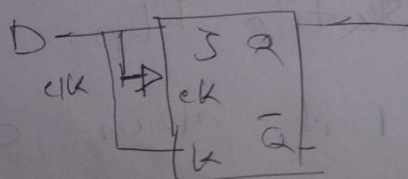
0	0	0
0	1	0
1	0	1
1	1	1

(D)



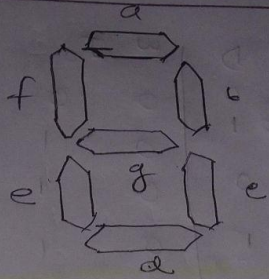
0	0	0
0	1	0
1	0	1
1	1	1

(T)



3:

$$\begin{aligned}
 & \textcircled{3} \quad = \overline{A}B\overline{C} + \overline{B}C + A\overline{B}\overline{C} \\
 & = \overline{A}B\overline{C} + \overline{B}C + A\overline{B}\overline{C} \\
 & = \overline{A}B\overline{C} \cdot \overline{B}C \cdot A\overline{B}\overline{C} \\
 & = (\overline{A} + \overline{B} + \overline{C}) \cdot \overline{B}C \cdot (\overline{A} + \overline{B} + \overline{C}) \\
 & = (\overline{A} + \overline{B} + \overline{C}) \cdot \overline{B}C \cdot (\overline{A} + \overline{B} + \overline{C}) \\
 & = \overline{A}B\overline{C} + \overline{B}C + A\overline{B}\overline{C} \\
 & = \overline{B} + \overline{C} + A\overline{B}\overline{C} \\
 & = \overline{B} + \overline{C} (A + A\overline{B}\overline{C}) \\
 & = \overline{B} + \overline{C} \\
 & = \overline{\overline{B} + \overline{C}} \\
 & = \overline{\overline{B} \cdot \overline{C}} \\
 & = \overline{B \cdot C} \quad (A_{m})
 \end{aligned}$$



	A	A	B	a	b	c	d	e	f	g
0	0	0	0	1	1	1	1	1	1	0
1	0	0	1	0	1	1	0	0	0	0
2	0	1	0	1	1	0	1	1	0	1
		1	1	x	x	x	x	x	x	x
				x	x	0	x	x		

A	B
0	2
1	3

①

A	0	1
B	1	1
1	0	x

$$a = \bar{B}$$

②

A	0	1
B	1	1
0	0	x

$$d = \bar{B}$$

③

A	0	1
B	1	1
0	0	x

$$e = \bar{B}$$

④

A	0	1
B	1	1
0	0	x

$$b = 1$$

⑤

A	0	1
B	1	0
0	0	x

$$f = \bar{A} \bar{B}$$

⑥

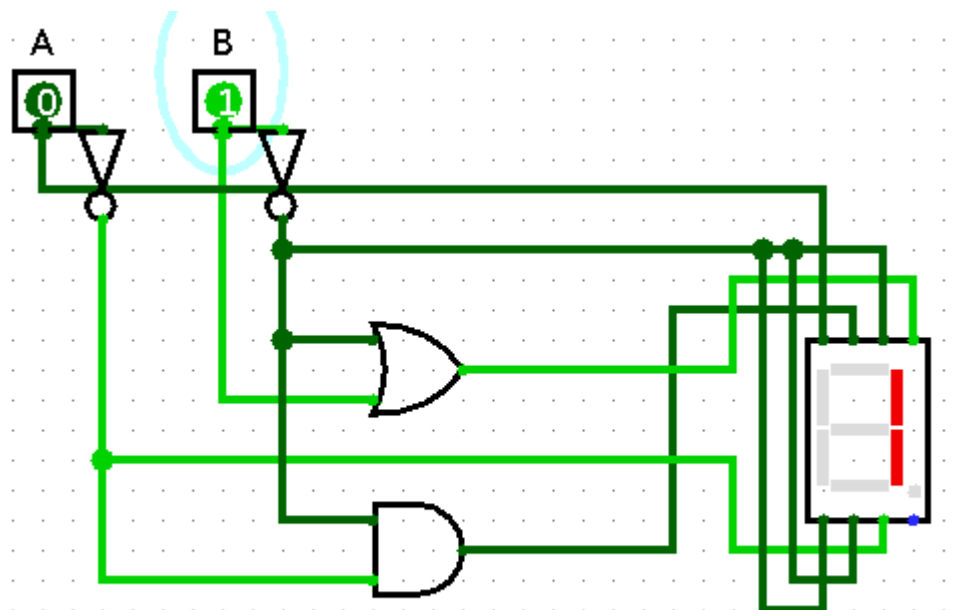
A	0	1
B	1	0
1	1	x

$$c = \bar{A}$$

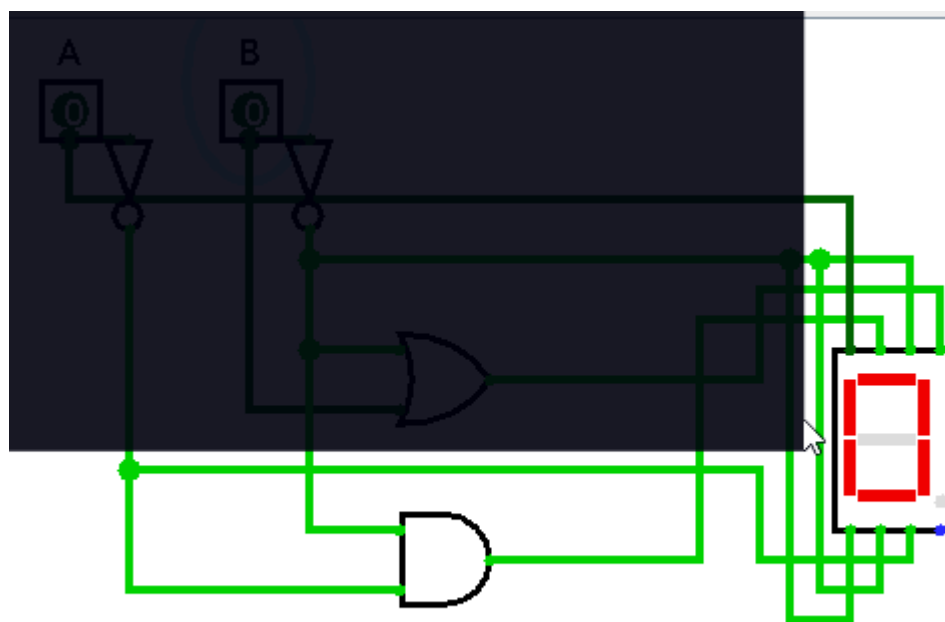
⑦

A	0	1
B	0	1
1	0	x

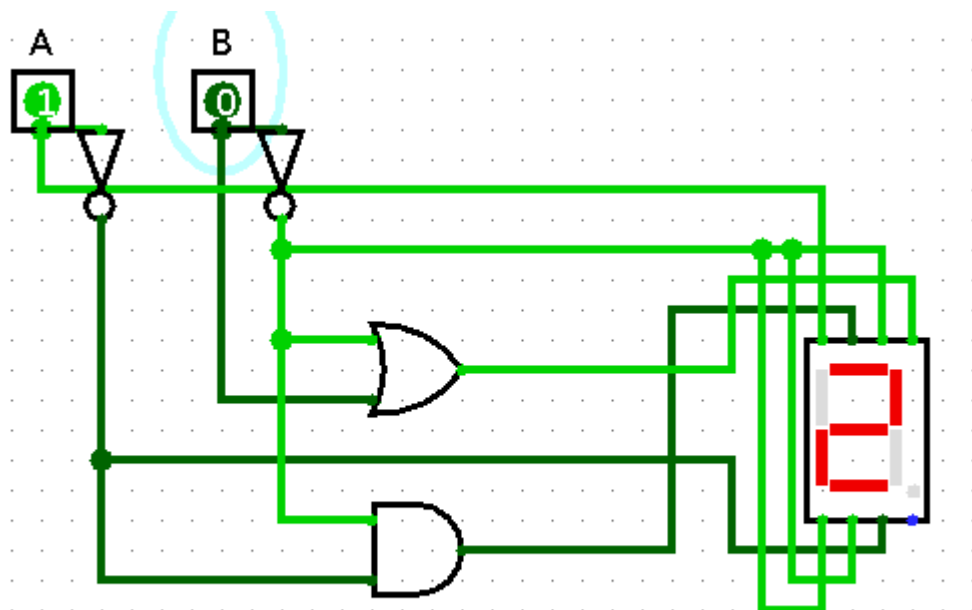
$$g = \bar{A}$$



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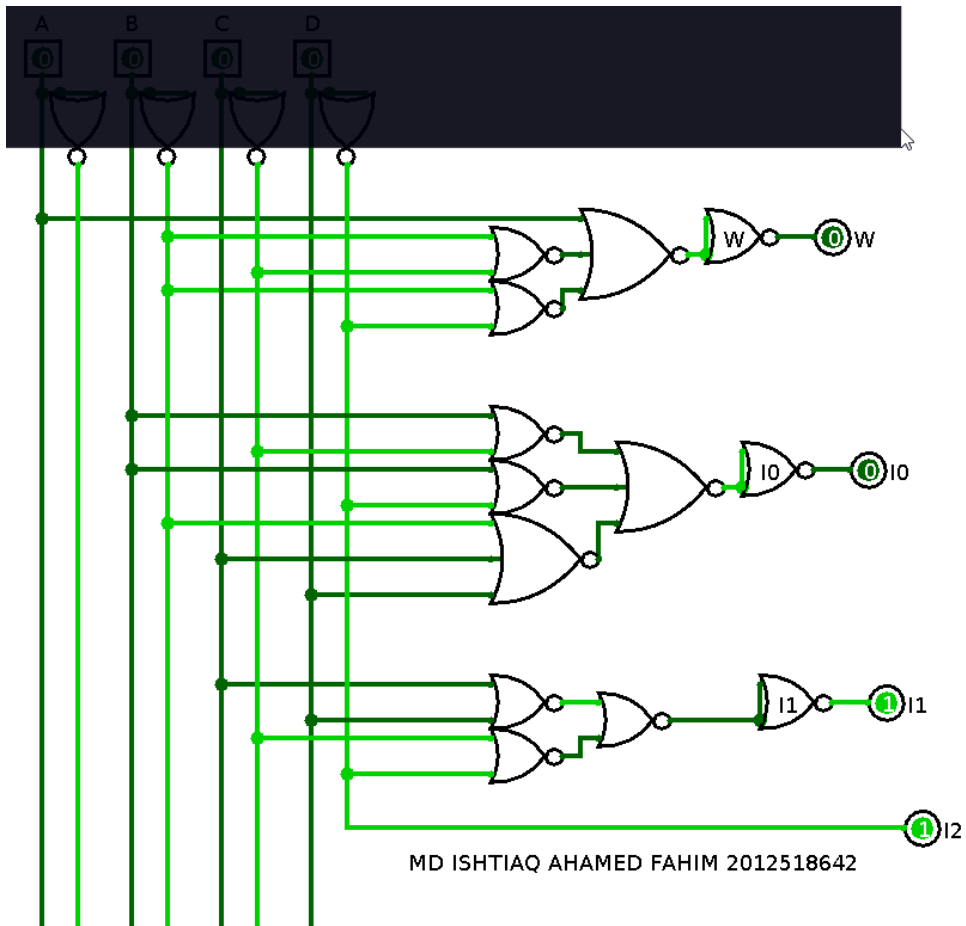
4 :

④

	A	B	C	D	ω	I_0	I_1	I_2
0	0	0	0	0	0	0	1	1
1	0	0	0	1	0	1	0	0
2	0	0	1	0	0	1	0	1
3	0	0	1	1	0	1	1	0
4	0	1	0	0	0	1	1	1
5	0	1	0	1	1	0	0	0
6	0	1	1	0	1	0	0	1
7	0	1	1	1	1	0	1	0
8	0	0	0	0	1	0	0	0
9	1	0	0	1	1	1	0	0
	1	0	1	0				
	1	0	1	1				
	1	1	0	0				

0	1	3	2
4	5	7	6
11	12	14	13
8	9	10	9

0	1	3	2
4	5	7	6
12	13	15	14
8	9	11	10



Σ

	00	01	11	10
00	0	0	0	0
01	0	1	1	1
11	x	x	x	x
10	1	1	x	x

$$W = A + B\bar{C} + BD$$

I_0

	00	01	11	10
00	0	1	1	1
01	1	0	0	0
11	x	x	x	x
10	0	1	x	x

$$I_0 = B\bar{C} + BD + B\bar{C}D$$

I_1

	00	01	11	10
00	1	0	1	0
01	1	0	1	0
11	x	x	x	x
10	1	0	x	x

$$I_1 = \bar{C}\bar{D} + CD$$

I_2

	00	01	11	10
00	1	0	0	1
01	1	0	0	1
11	x	x	x	x
10	1	0	x	x

$$I_2 = D'$$

3	2
7	6
15	14
11	10

A	A
1	0
1	1
1	0
1	0
1	0
1	0
1	0
1	0
1	0

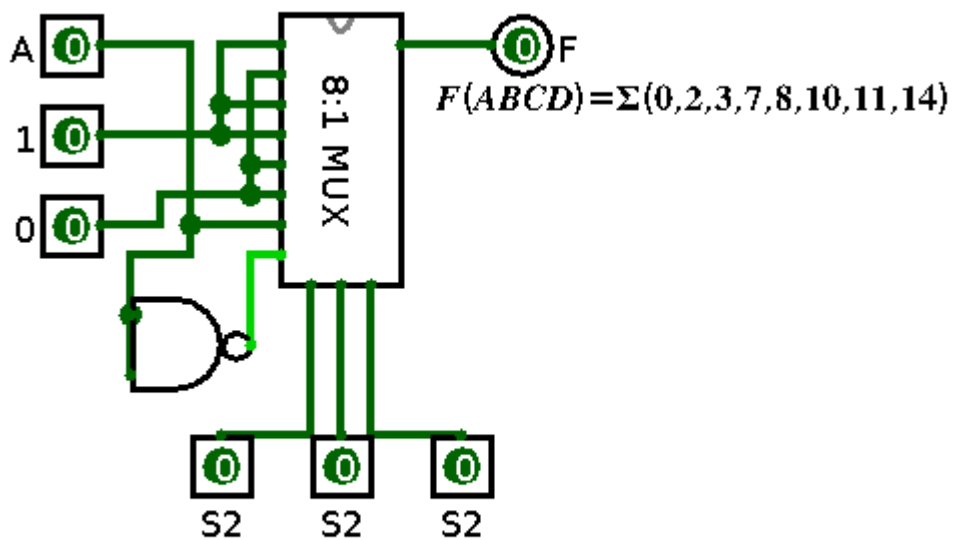
⑤ 8:1 MUX $g = \log_2 8 = 3$

S_2	S_1	S_0	I_0	I_1	I_2	I_3	I_4	I_5	I_6	I_7
0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0	0	0	0

$F(A, B, C, D) = \Sigma(0, 2, 3, 7, 8, 10, 11, 14)$

Truth Table for $F(A, B, C, D)$:

A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



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