

MODUL 5. ALJABAR BOOLEAN

NIM : L200180010

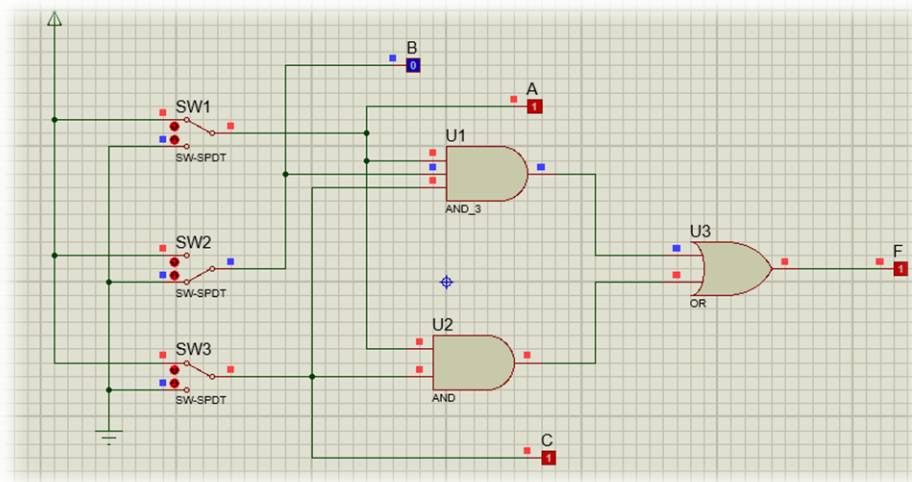
Nama : Ismi Dzikrina

Nama Assisten : Riza

Tanggal Praktikum : 27 Maret 2019

Percobaan 1

1. Kombinasi gerbang logika



2. Fungsi boolean : $F = ABC + AC$

3. Mengisi tabel kebenaran

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

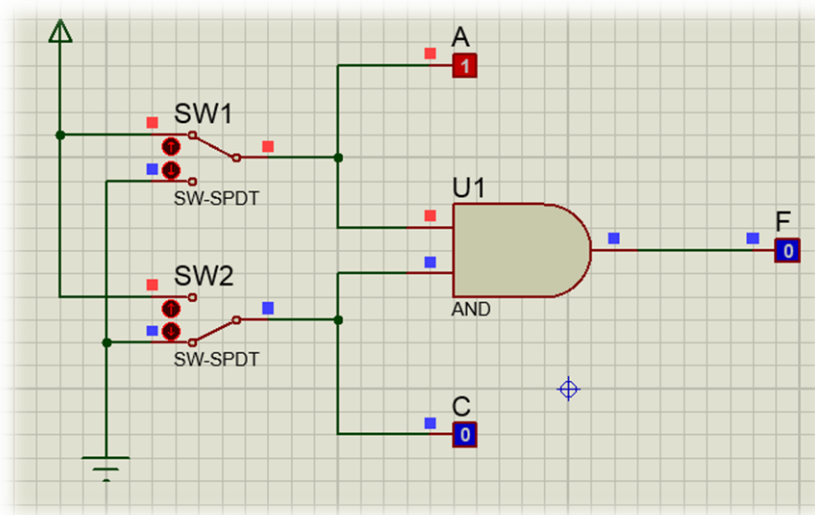
4. Karnaugh map

		AB			
		00	01	11	10
C	0				
	1			1	1

5. Fungsi boolean berdasarkan karnaugh map:

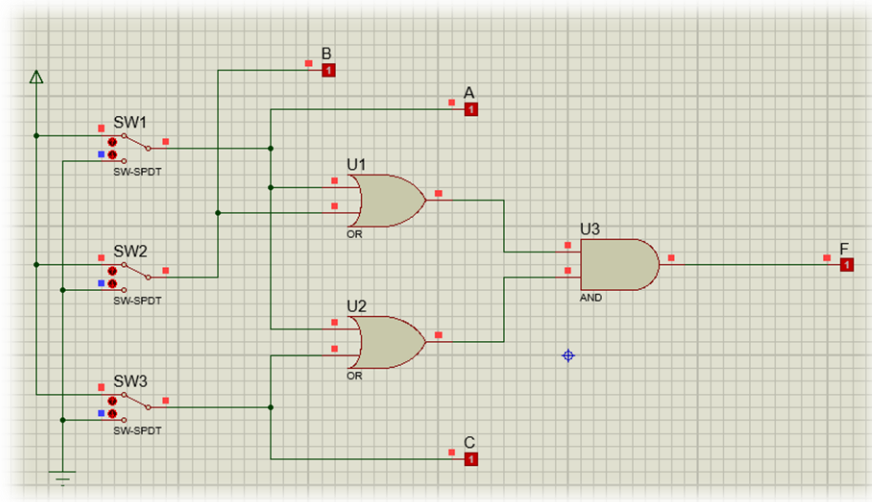
$$F = AC$$

6. Kombinasi gerbang logika berdasarkan fungsi boolean baru



Percobaan 2

1. Kombinasi gerbang logika



2. Fungsi boolean : $F = (A + B) \cdot (A + C)$

3. Mengisi tabel kebenaran

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

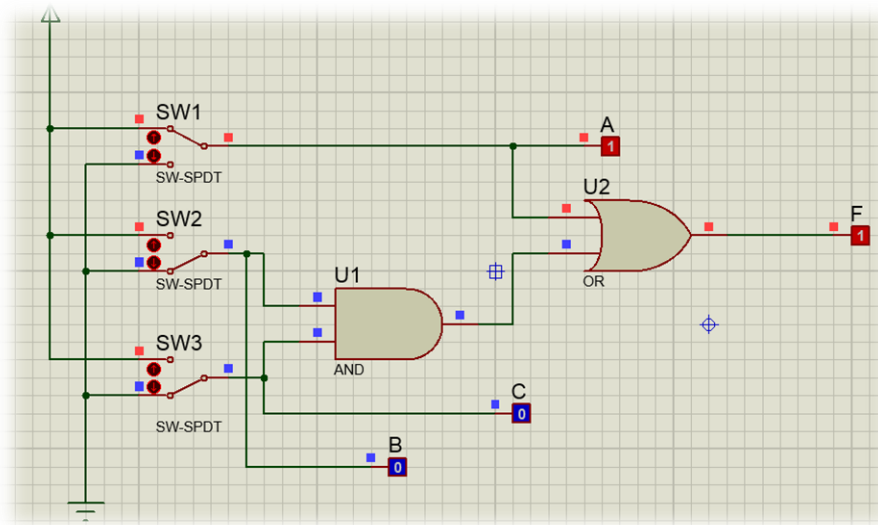
4. Karnaugh map

		AB			
		00	01	11	10
C	0			1	1
	1		1	1	1

5. Fungsi boolean berdasarkan karnaugh map:

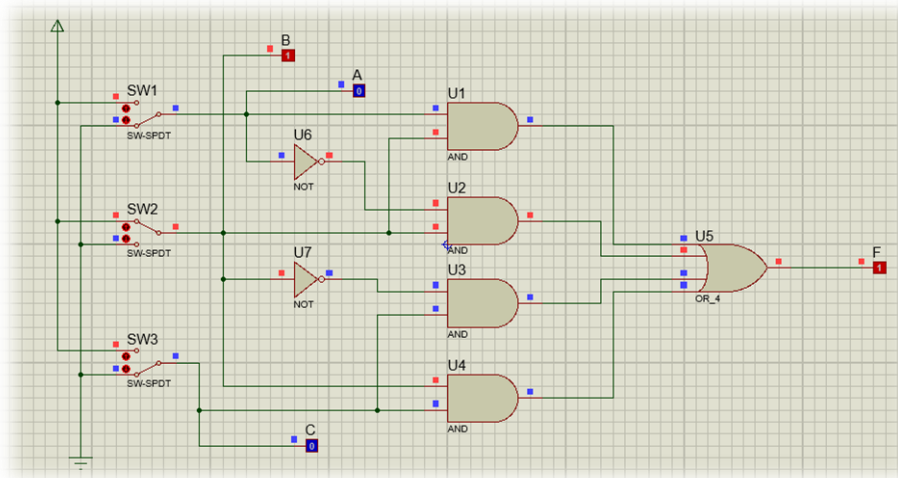
$$F = A + BC$$

6. Kombinasi gerbang logika berdasarkan fungsi boolean baru



Percobaan 3

1. Kombinasi gerbang logika



2. Fungsi boolean : $F = AB + A'B + B'C + BC$

3. Mengisi tabel kebenaran

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

4. Karnaugh map

		AB			
		00	01	11	10
C	0		1	1	
	1	1	1	1	1

5. Fungsi boolean berdasarkan karnaugh map:

$$F = B + C$$

6. Kombinasi gerbang logika berdasarkan fungsi boolean baru

