

LAPORAN PRAKTIKUM
SISTEM DIGITAL



Shafa Bani Saputra

L200190151

INFORMATIKA

FAKULTAS KOMUNIKASI DAN INFORMATIKA

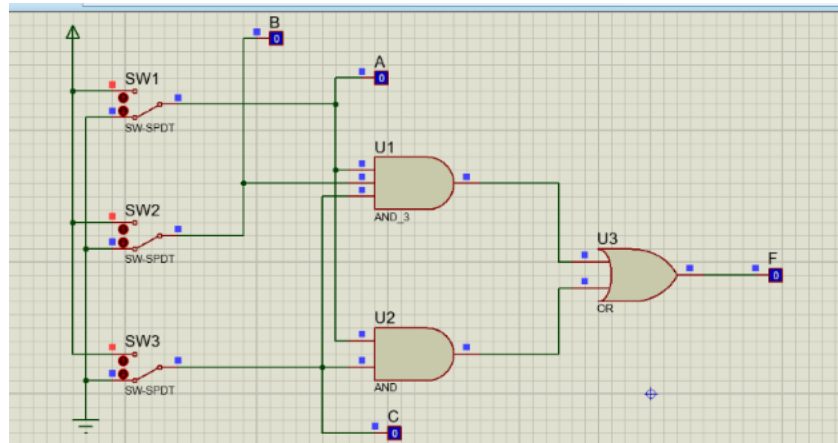
UNIVERSITAS MUHAMMADIYAH

SURAKARTA

KEGIATAN PRAKTIKUM

Percobaan 1

1. Membuat kombinasi gerbang logika



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

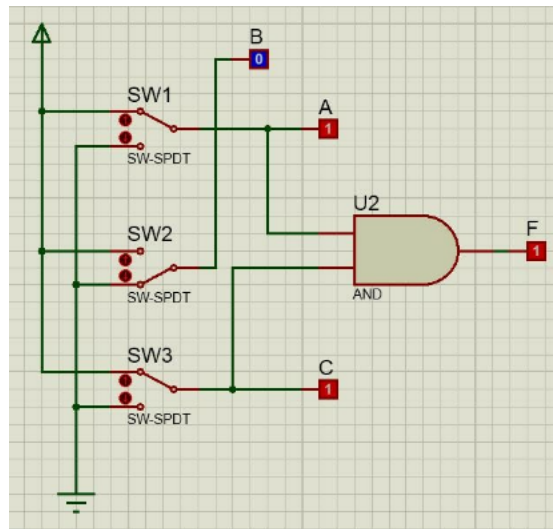
3. Tabel Kebenaran

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

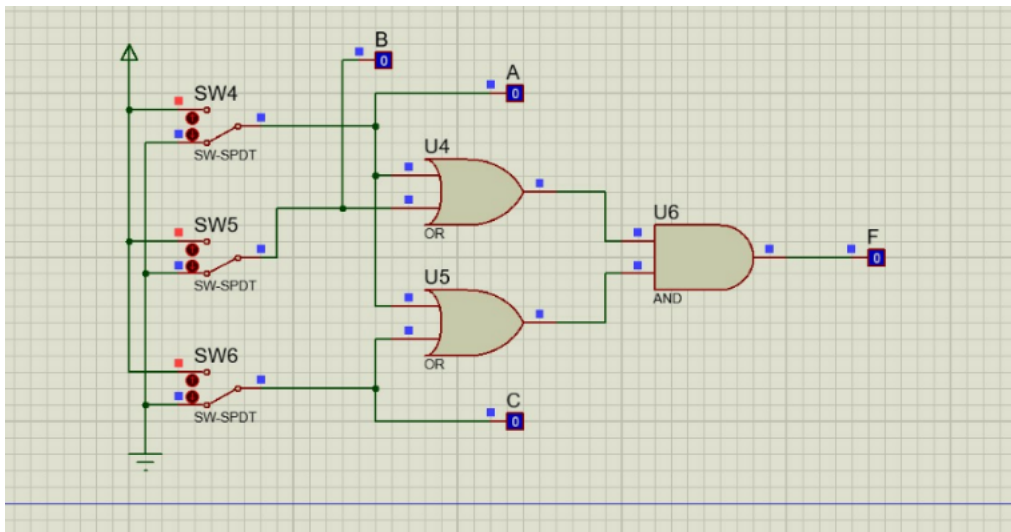
		AB			
		00	01	11	10
C	0	0	0	0	0
	1	0	0	1	1

5. Penyederhanaan Fungsi Boolean : $F = AC$



Percobaan 2

1. Membuat kombinasi gerbang logika



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

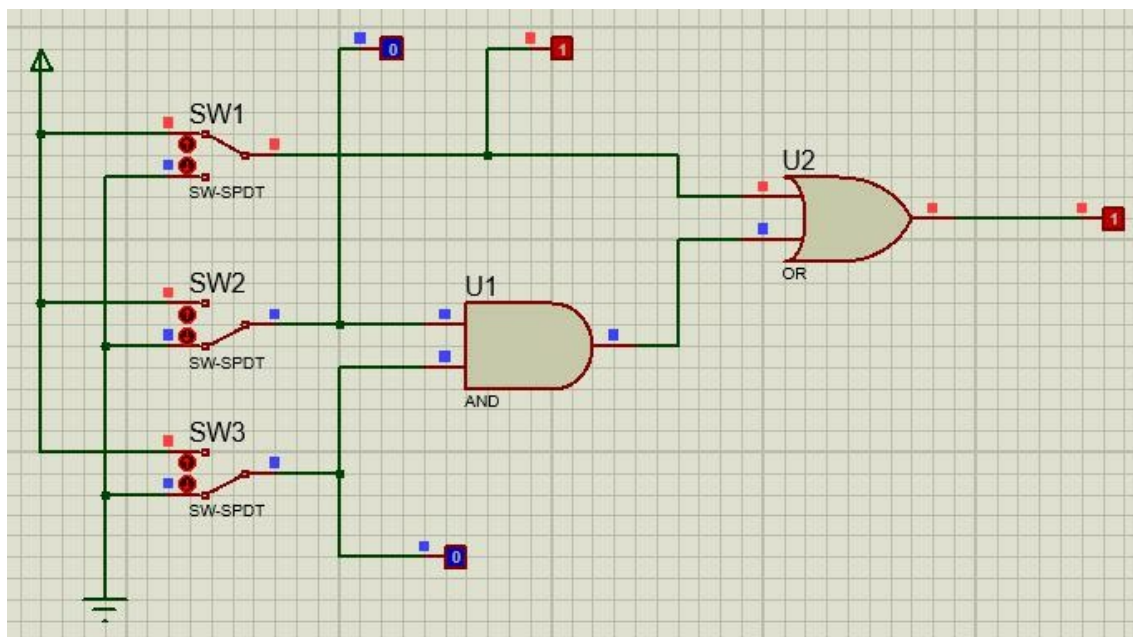
3. Tabel kebenaran

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

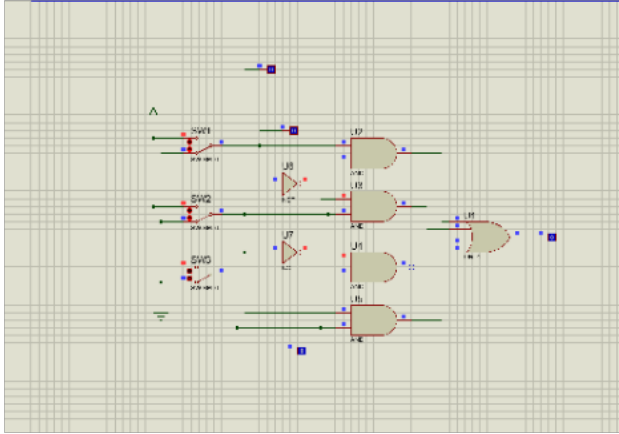
		AB			
		00	01	11	10
C	0	0	0	1	1
	1	0	1	1	1

5. Penyederhanaan Fungsi Boolean : $F = A + BC$



Percobaan 3

1. Membuat kombinasi gerbang logika



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

3. 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	0	1	1	0
	1	1	1	1	1

5. Penyerderhanaan Fungsi Boolean : $F = B + C$

