MODUL 8

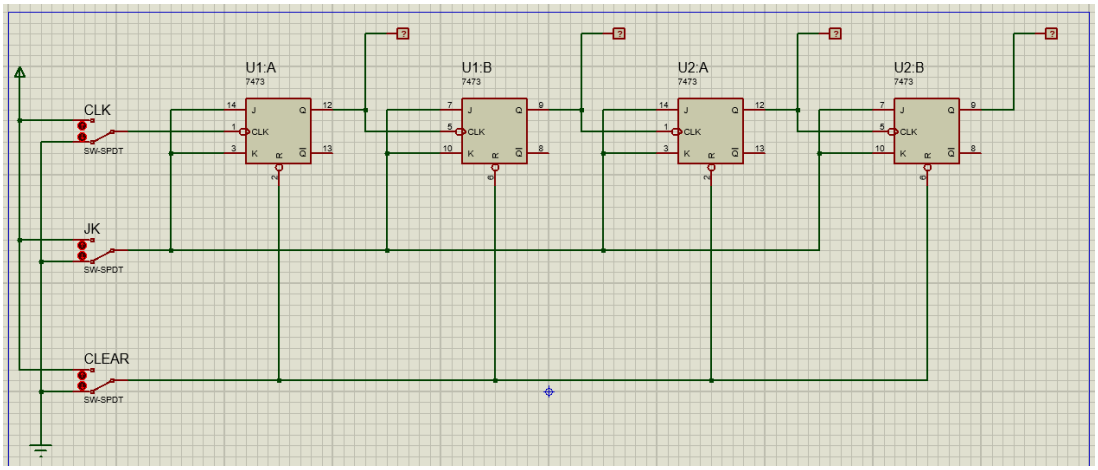
Aplikasi Flip – Flop

Nama : Krisna Alif Meilana

NIM : L200180028

Kelas : B

Percobaan 1



NO	INPUT			OUTPUT			
	CLEAR	JK	CLK	A	B	C	D
1	1	1	0	0	0	0	0
2	1	1	1	0	0	0	0
3	1	1	0	0	0	0	1
4	1	1	1	0	0	0	1
5	1	1	0	0	0	1	0
6	1	1	1	0	0	1	0
7	1	1	0	0	1	0	1
8	1	1	1	0	0	1	0
9	1	1	0	0	1	0	0
10	1	1	1	0	1	0	1
11	1	1	0	0	1	0	1
12	1	1	1	0	1	0	1
13	1	1	0	0	1	1	0
14	1	1	1	0	1	1	1
15	1	0	0	0	1	1	1
16	1	0	1	0	1	1	1
17	1	1	0	0	1	1	0
18	1	1	1	0	1	1	0
19	0	1	0	0	0	0	0
20	0	1	1	0	0	0	0

Fungsi

Switch CLK = Menambah nilai output

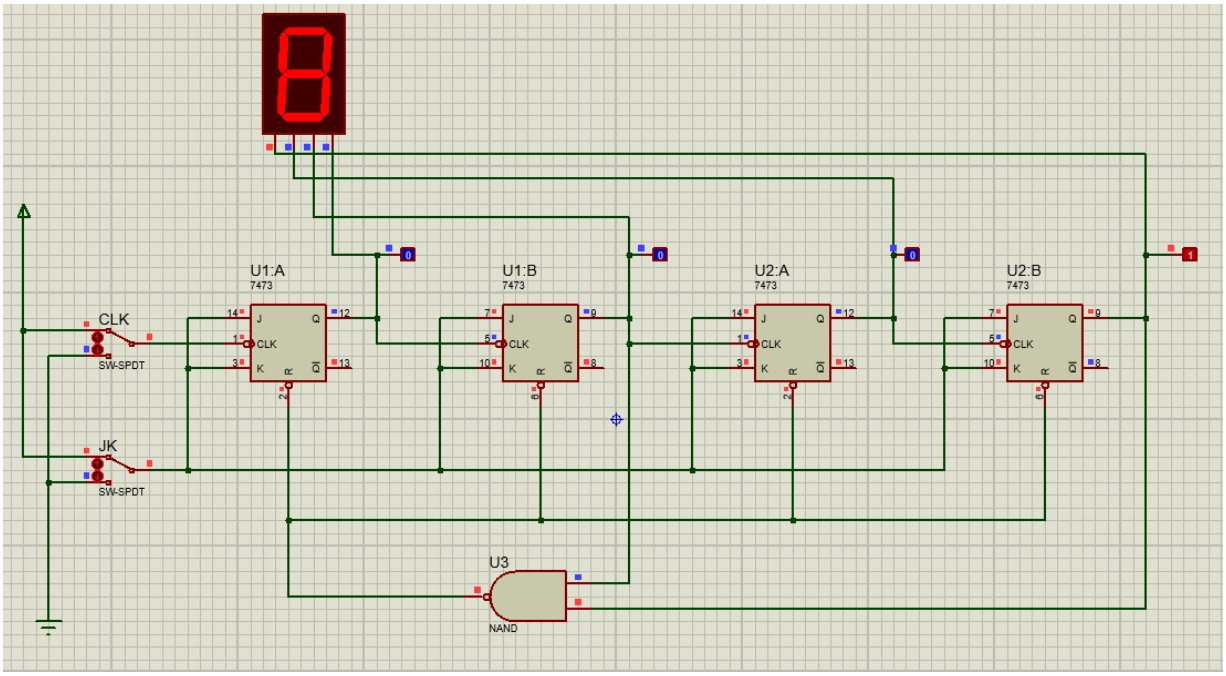
Switch JK = Menyimpan nilai output

Switch CLEAR = Menambah semua ouput

Kesimpulan

JK Sebagai input pengendali untuk menentukan apa yang akan dilakukan oleh FF Ketika clock yang meningkat

Percobaan 2

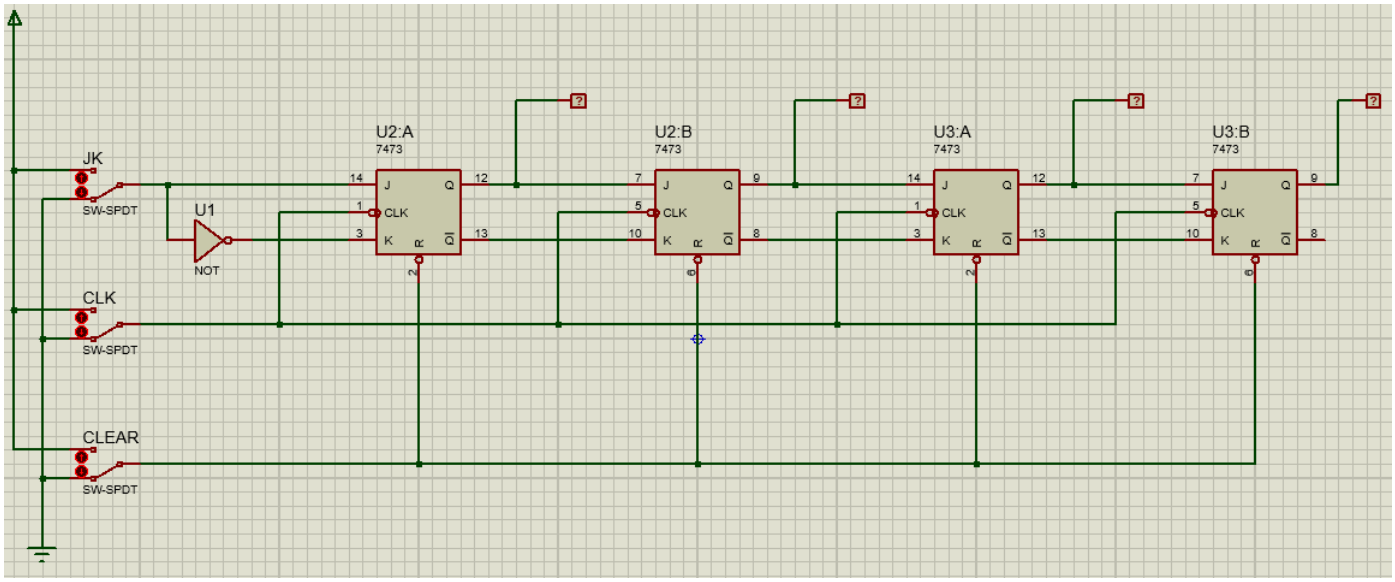


NO	INPUT		OUTPUT			
	JK	CLK	A	B	C	D
1	1	0	0	0	0	0
2	1	1	0	0	0	0
3	1	0	0	0	0	1
4	1	1	0	0	0	1
5	1	0	0	0	1	0
6	1	1	0	0	1	1
7	1	0	0	0	1	1
8	1	1	0	0	1	0
9	1	0	0	1	0	0
10	1	1	0	1	0	0
11	1	0	0	1	0	1
12	1	1	0	1	0	1
13	1	0	0	1	1	0
14	1	1	0	1	1	0
15	1	0	0	1	1	1
16	1	1	0	1	1	1
17	1	0	1	0	0	0
18	1	1	1	0	0	0
19	1	0	1	0	0	1
20	1	1	1	0	0	1
21	0	0	1	0	0	1
22	0	1	1	0	0	1
23	1	0	0	0	0	0
24	1	1	0	0	0	0

Kesimpulan

Setiap Output A = 1,7 SEG – BCD = 1
Setiap Output B = 1,7 SEG – BCD = 2
Setiap Output C = 1,7 SEG – BCD = 4
Setiap Output D = 1,7 SEG – BCD = 8

Percobaan 3



NO	CLR	JK	CLK	A	B	C	D
1	0	X	-	0	0	0	0
2	1	1	-	0	0	0	0
3	1	1	1	0	0	0	1
4	1	1	2	0	0	1	1
5	1	1	3	0	1	1	1
6	1	0	4	1	1	1	0
7	1	0	5	1	1	0	0
8	1	0	6	1	0	0	0
9	1	0	7	0	0	0	0
10	1	0	8	0	0	0	0
11	1	1	9	0	0	0	1
12	1	0	10	0	0	1	0
13	1	0	11	0	1	0	0
14	1	0	12	1	0	0	0
15	1	0	13	0	0	0	0

Kesimpulan

Terjadi pertukaran biner apabila 2x **JK** Keluarannya 0, Maka Hasilnya 0. Jika Keluarannya 1, Maka Hasilnya 1.