

DIGITAL SYSTEM

PRACTICUM REPORT 6 : KARNAUGH MAP



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INFORMATION TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATICS

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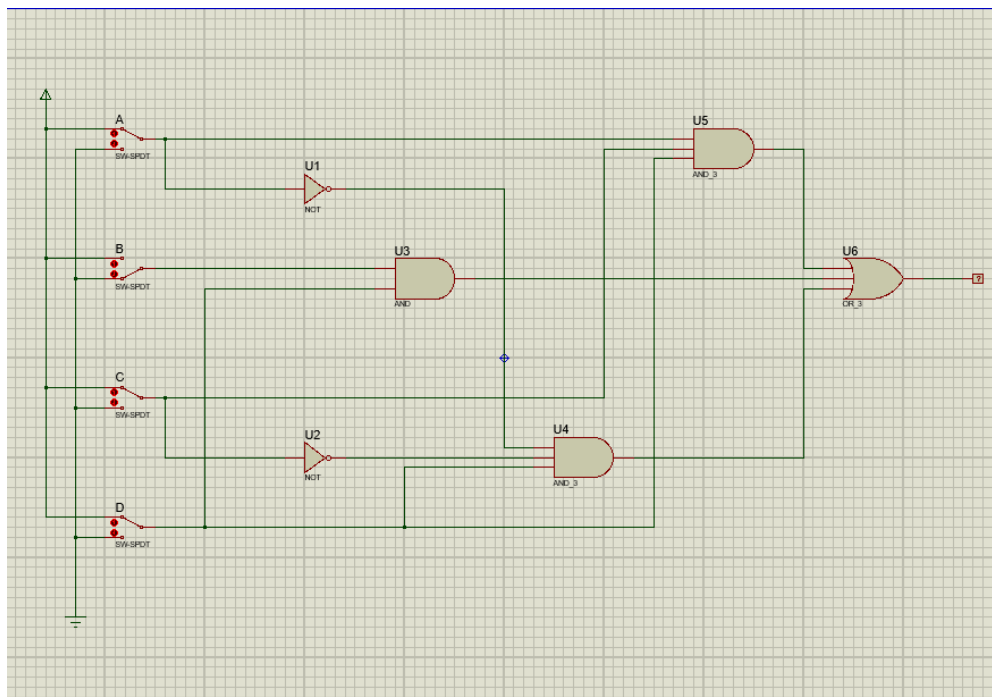
2019

NIM : L200184172
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CLASS : X
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DATE OF PRACTICUM : Friday, April 26th 2019

Exercise 1

		AB			
		00	01	11	10
CD	00	0	0	0	0
	01	1	1	1	0
	11	0	1	1	1
	10	0	0	0	0

Fungsi Boolean : $F = BD + A'C'D + ACD$

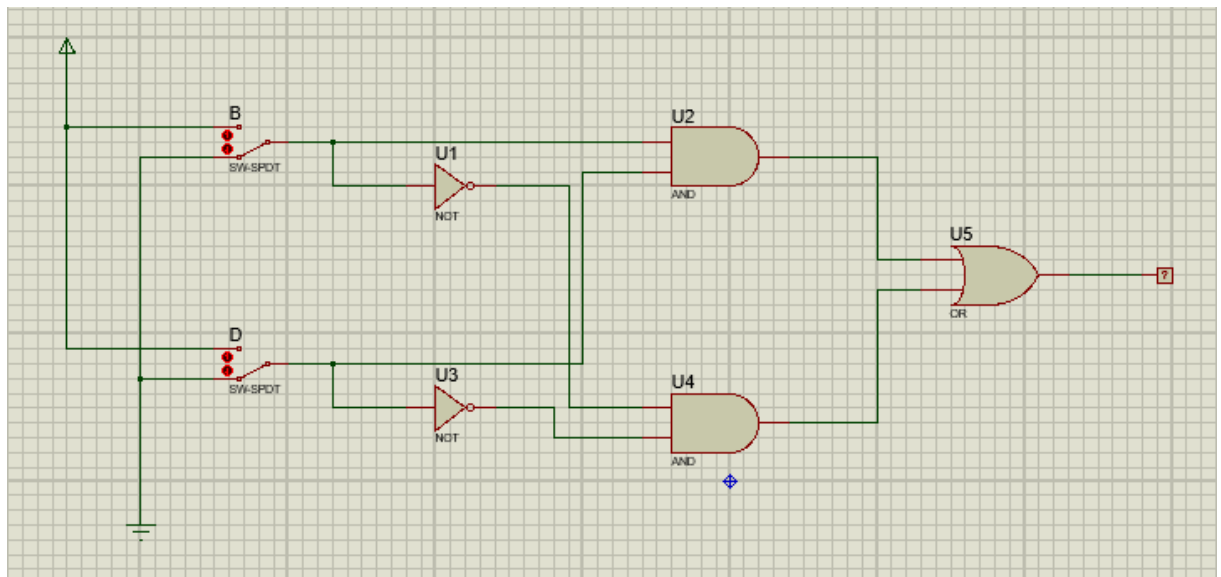


Exercise 2

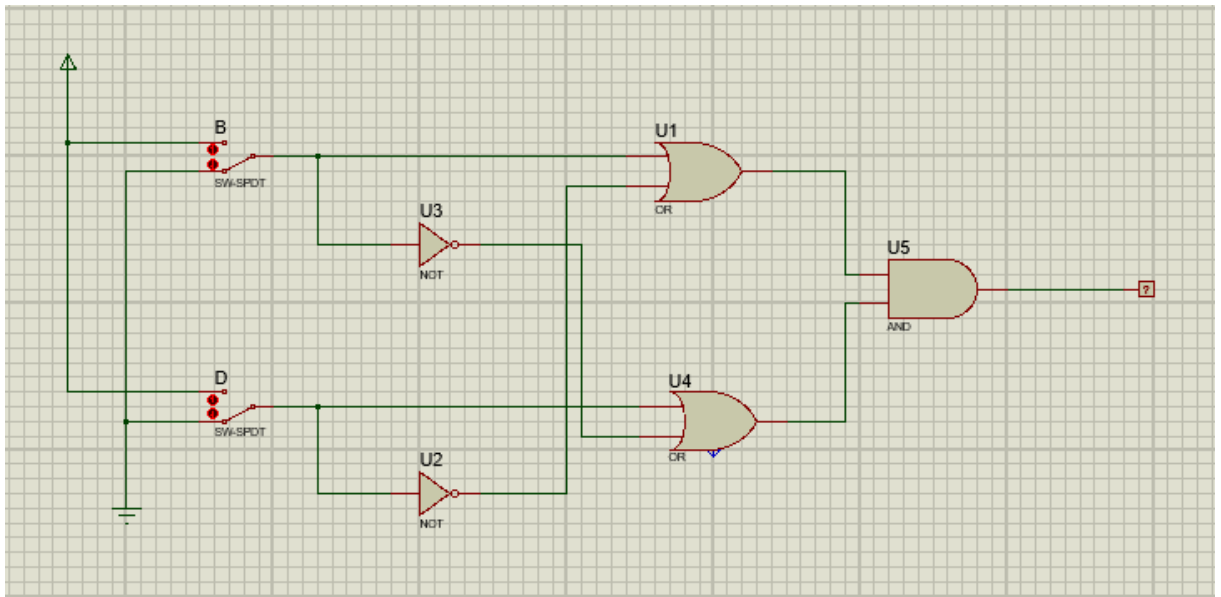
		AB			
		00	01	11	10
CD	00	1	0	0	1
	01	0	1	1	0
	11	0	1	1	0
	10	1	0	0	1

Fungsi Boolean :

- $F = B'D' + BD$ <AND – OR>



- $F = (B' + D) (B + D')$ <OR – AND>

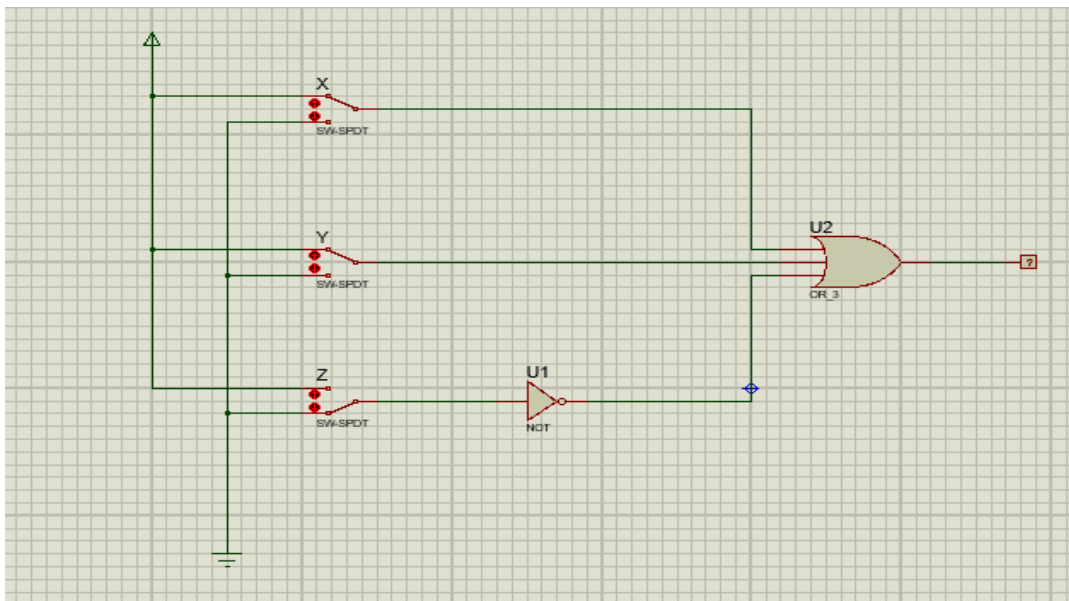


both combinations give the same results

Exercise 3

		XY			
		00	01	11	10
Z	0	1	1	1	1
	1	0	1	1	1

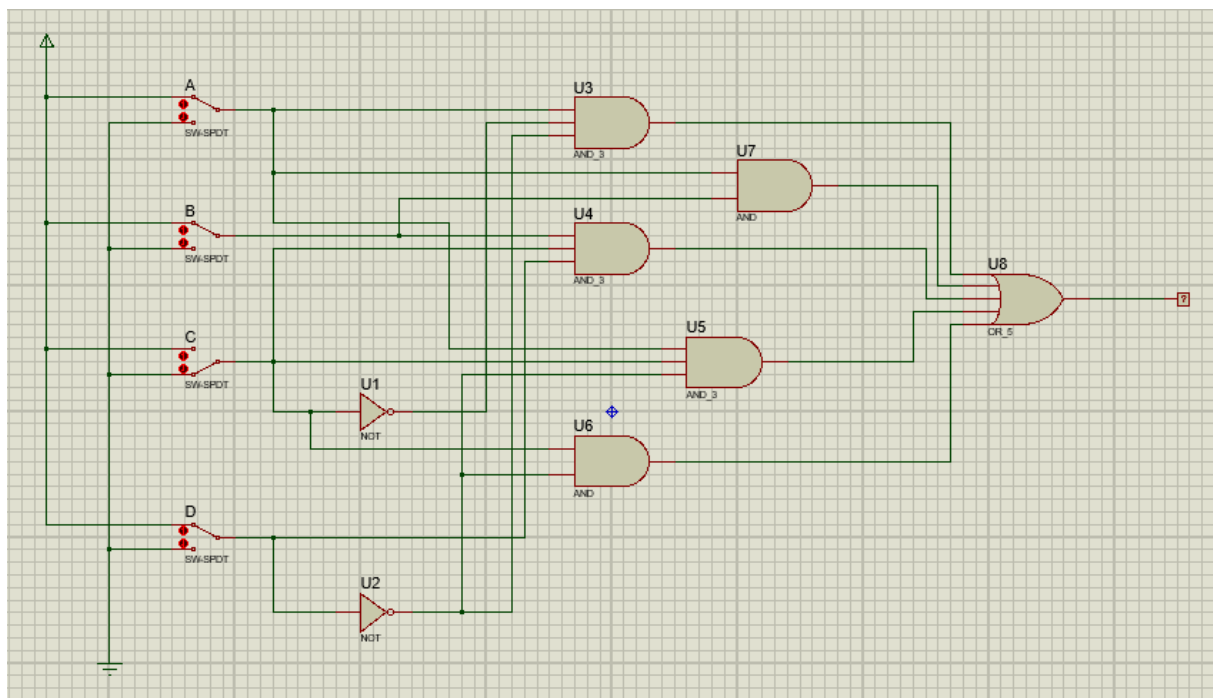
Fungsi Boolean : $F = X + Y + Z'$



Exercise 4

		AB			
		00	01	11	10
CD	00	0	1	1	1
	01	0	0	1	0
	11	0	1	1	0
	10	0	0	1	1

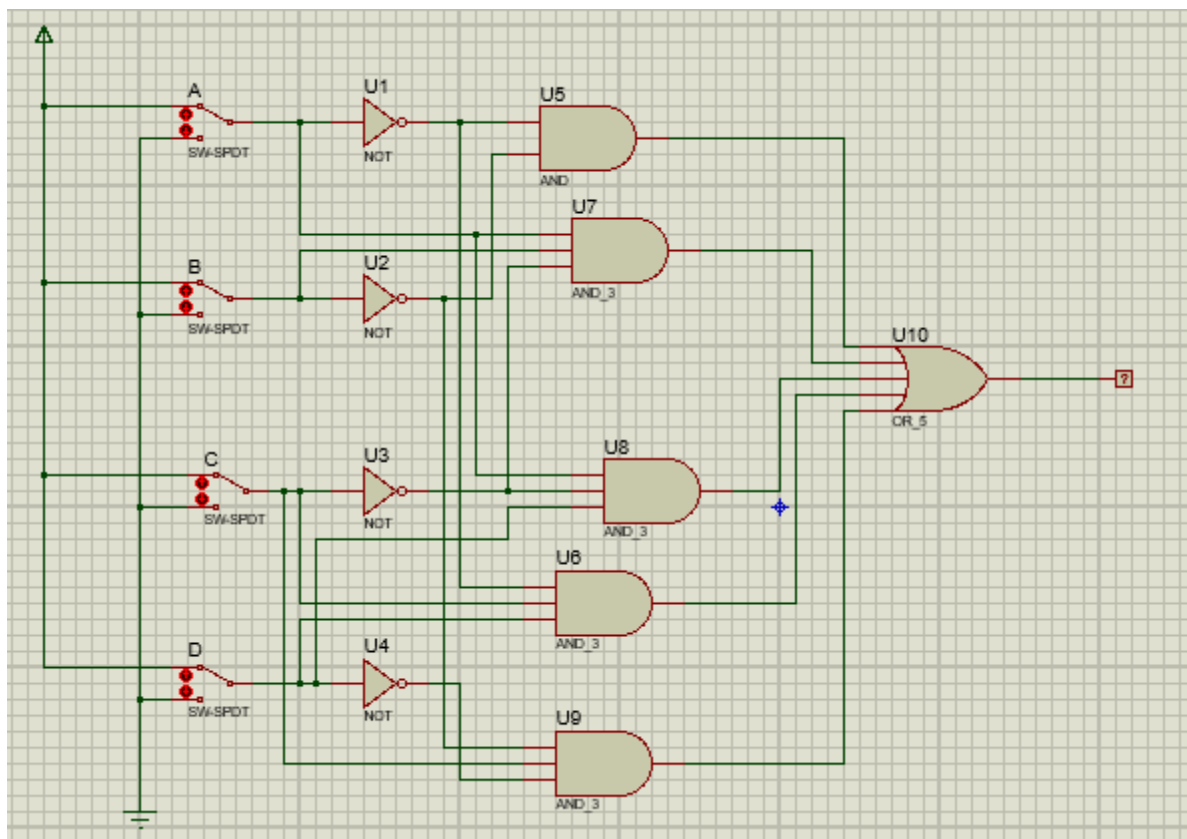
Fungsi Boolean : $F = C'D' + AC'D' + BCD + ACD' + AB$



Exercise 5

		AB			
		00	01	11	10
CD	00	1	0	1	0
	01	1	0	1	1
	11	1	1	0	0
	10	1	0	0	1

Fungsi Boolean : $F = A'B' + ABC' + AC'D + A'CD + B'CD'$



both combinations give the same results