

DIGITAL SYSTEM
PRACTICUM REPORT 6 : KARNAUGH MAP



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2019

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CLASS : X

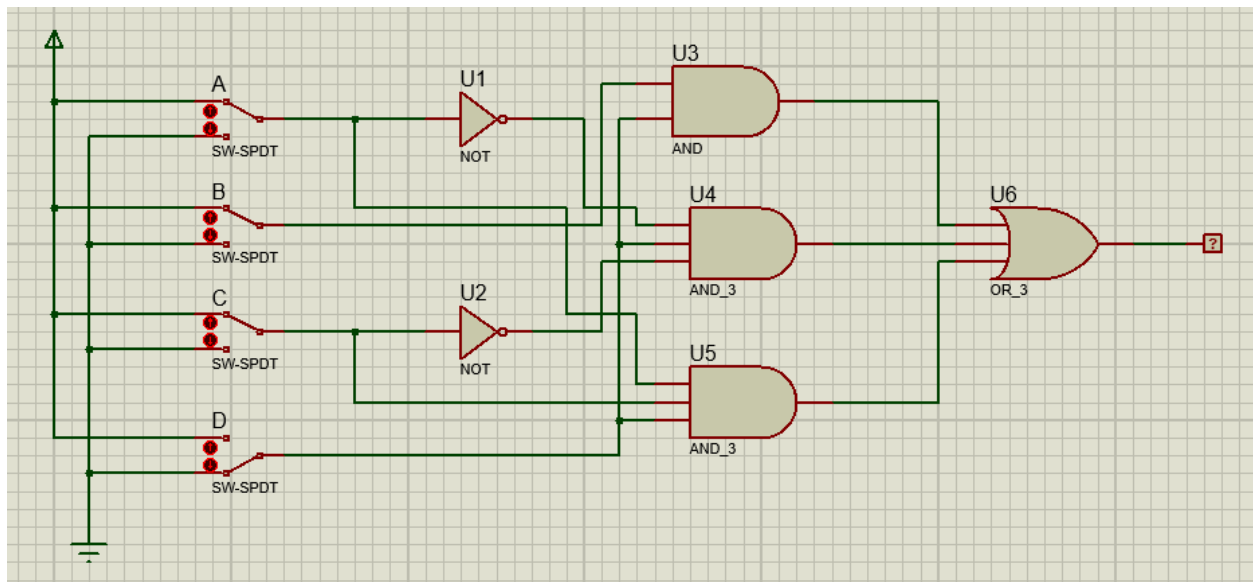
ASSISTANT : SALSA SASMITA MUKTI

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

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



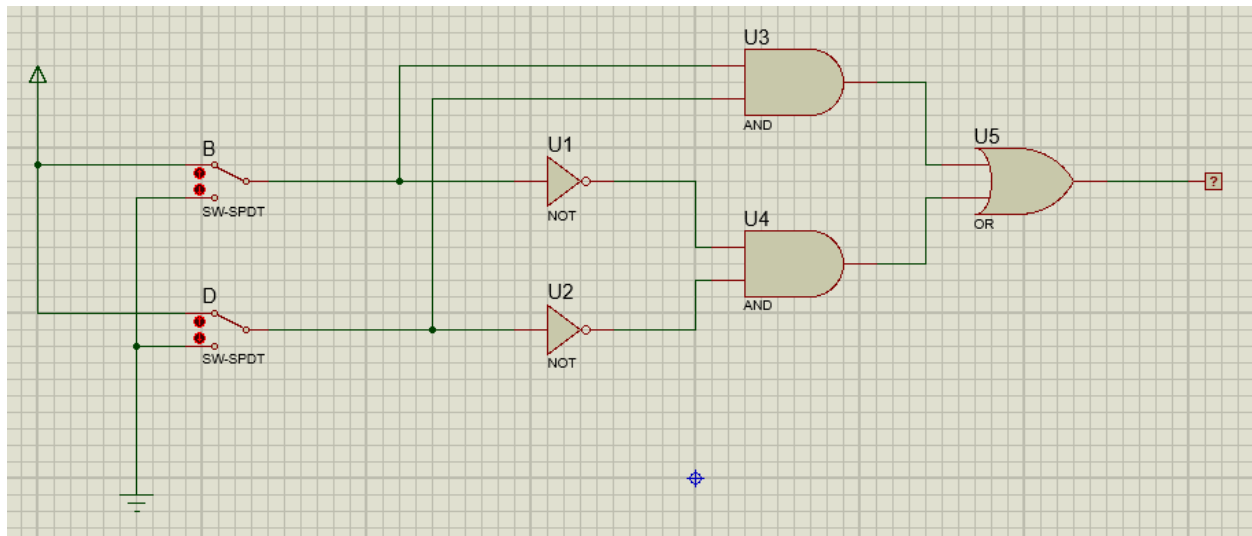
EXERCISE 2

		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

Boolean Function :

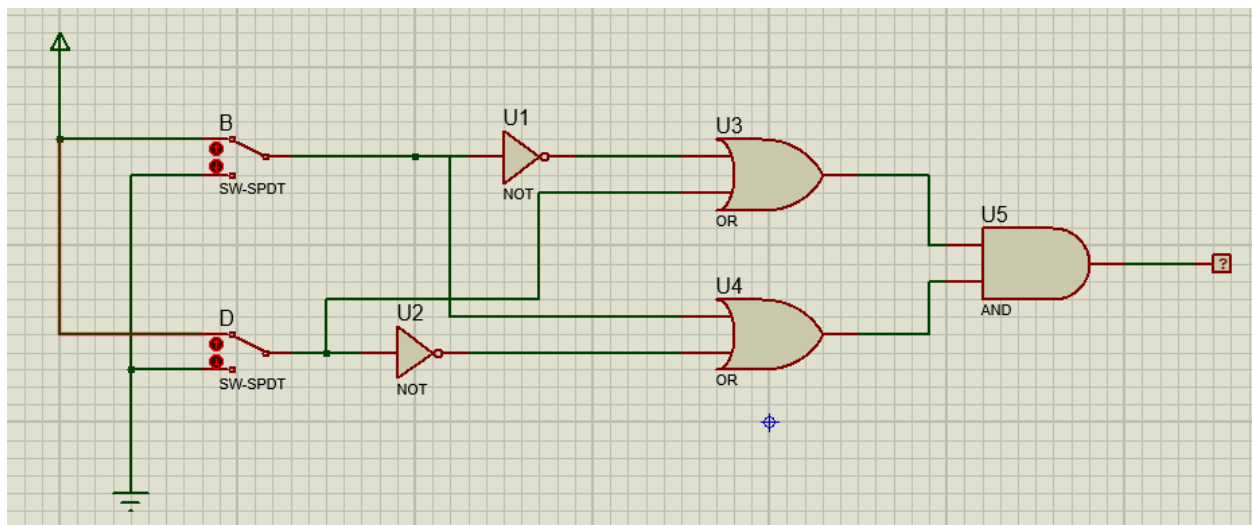
$$F = BD + B'D'$$

(AND-OR)



$$F = (B' + D')(B + D')$$

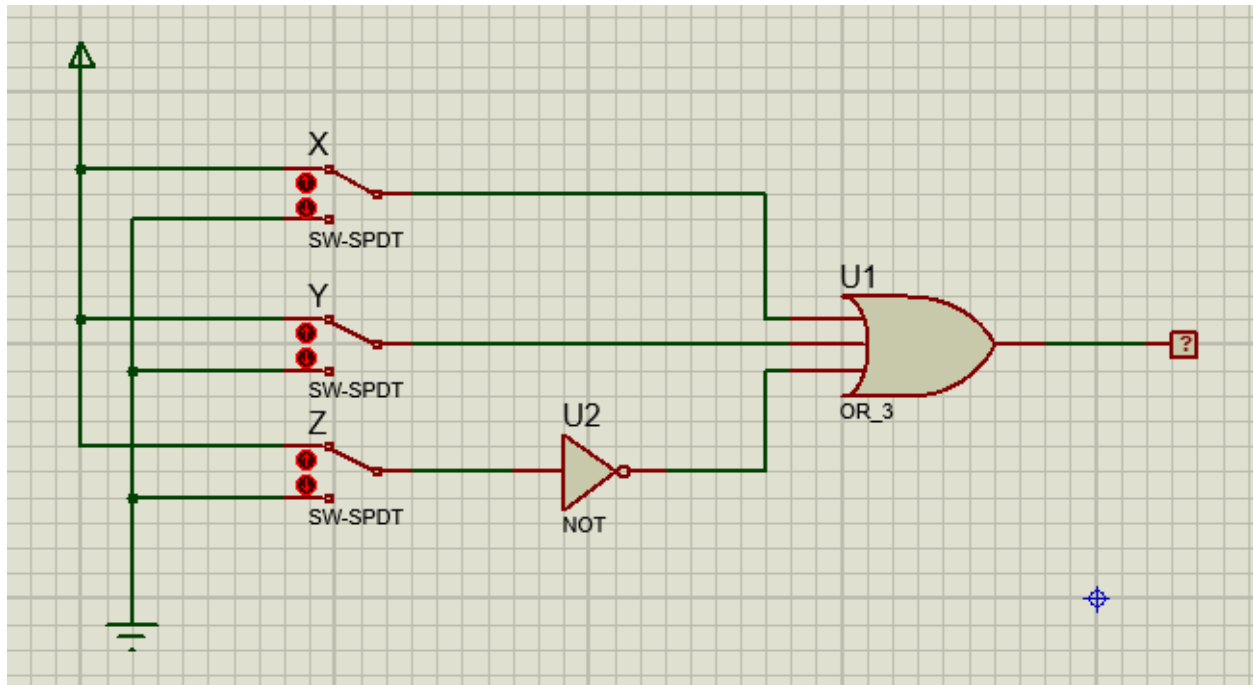
(OR-AND)



EXERCISE 3

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

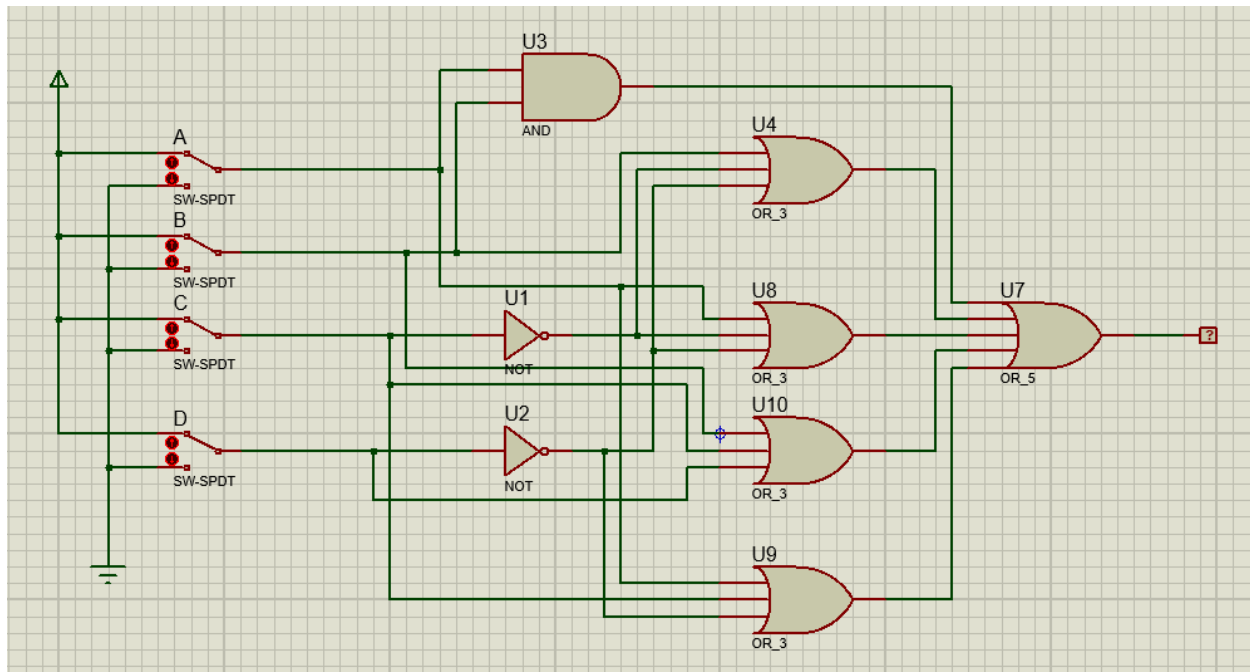
Boolean Function : $F = X + Y + Z'$



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

Boolean Function : $F = AB + BC'D' + AC'D' + BCD + ACD'$



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	1	0	1

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

