

PRACTICUM REPORT
DIGITAL SYSTEM
ADDITIONAL ASSIGNMENT LOGIC GATE COMBINATION



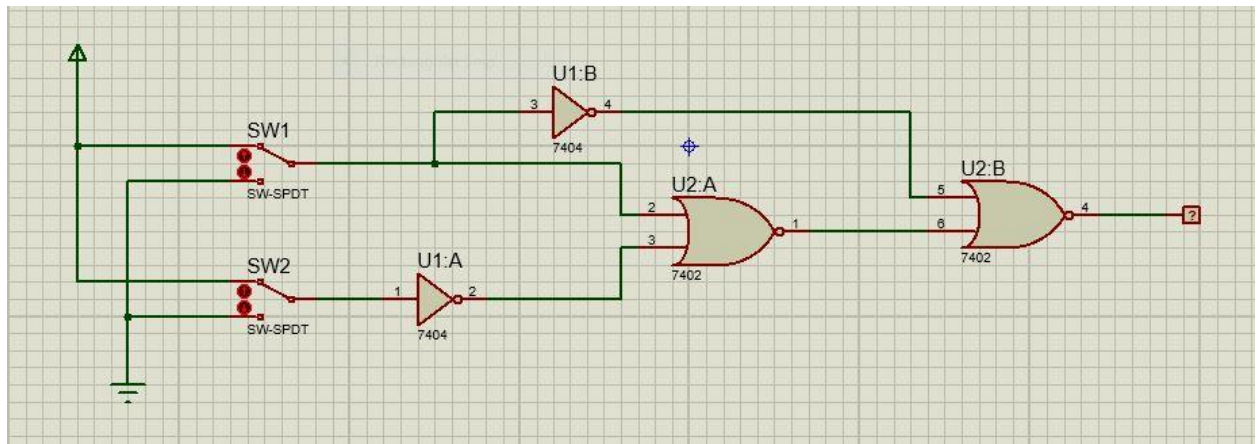
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ADDITIONAL ASSIGNMENT

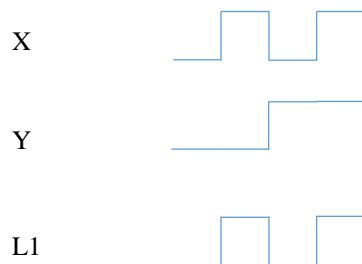
1. Create a logic gate combination as show in figure below!
 Answer :



a) Truth Table

X	Y	L1
0	0	0
1	0	1
0	1	0
1	1	1

b) Time Diagram



c) Boolean Function

$$L1 = \overline{(\overline{x + y})} + \overline{x}$$

2. Create a logic gate circuit based on the following Boolean Function !

$$F = (\overline{\overline{A} \cdot B + C}) + (\overline{D} \cdot E)$$

