

DIGITAL SYSTEMS LABORATORY WORK
MODUL 4 : COMBINATION OF LOGIC GATE
ADDITIONAL ASSIGNMENT



By :

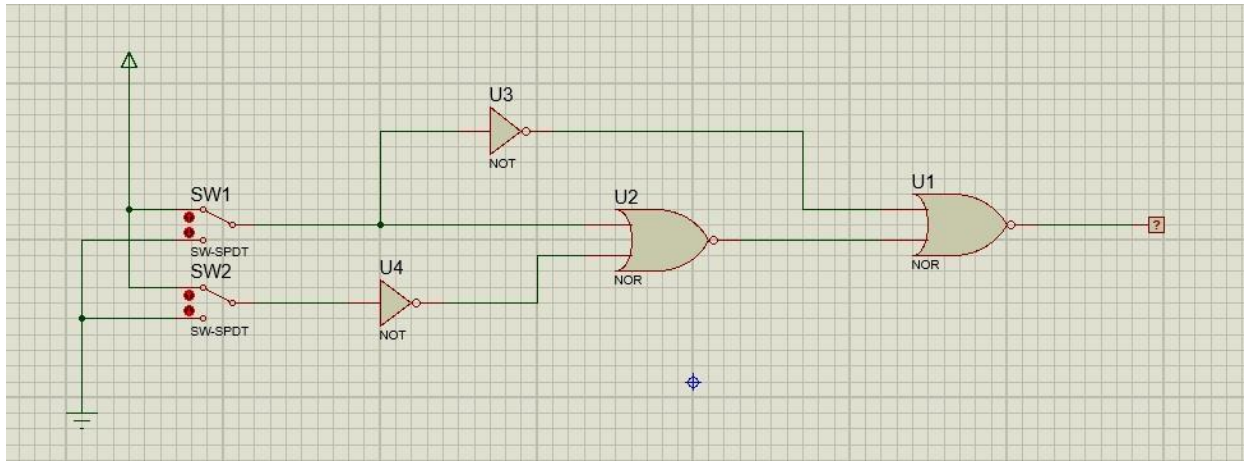
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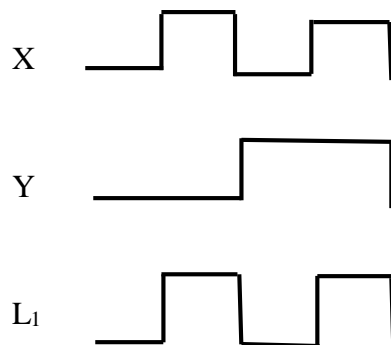
1. Create a logic gate combination as show in figure below !



a. The truth table

X	Y	L ₁
0	0	0
1	0	1
0	1	0
1	1	1

b. Time diagram



c. Boolean function :

$$\overline{\overline{X + Y}} + A$$

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

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

