

PRACTICUM REPORT
DIGITAL SYSTEM
ADDITIONAL ASSIGNMENT LOGIC GATE COMBINATION



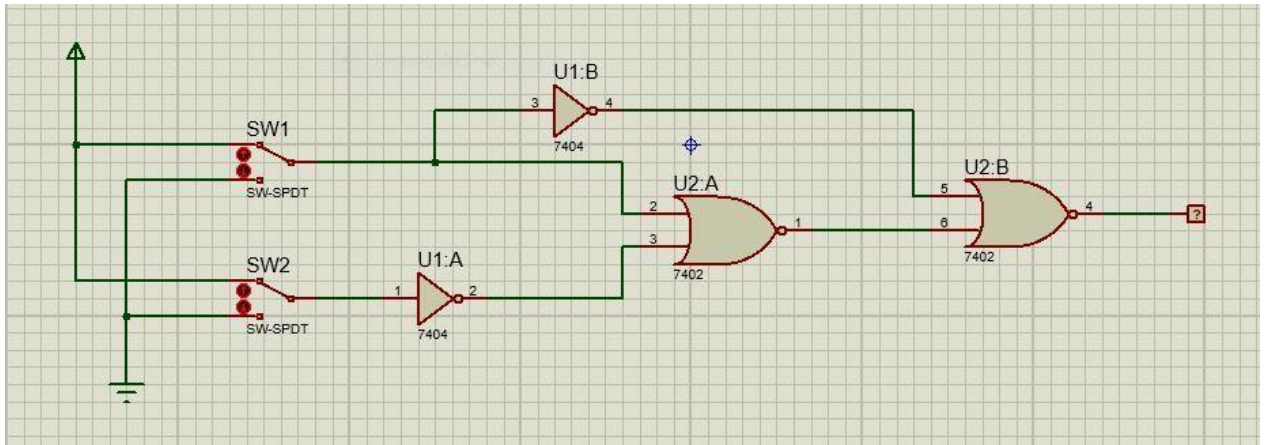
NAME : MUHAMMAD ROSYAD ADI PRATAMA
NIM : L200184044

INFORMATION TECHNOLOGY
FACULTY OF COMMUNICATION AND INFORMATICS
MUHAMMADIYAH UNIVERSITY OF SURAKARTA
2018/2019

ADDITIONAL ASSIGNMENT

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

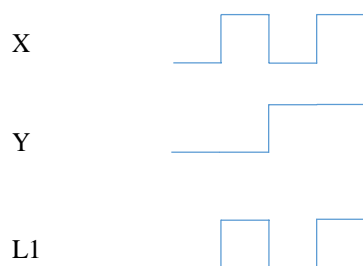
Answer :



- a) Truth Table

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

- b) Time Diagram



c) Boolean Function

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

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

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

