

# DIGITAL SYSTEMS LABORATORY WORK

## MODUL 1 : USE PROTEUS 8



By :

NUR ANNIDA I'FFAH SUPARDI

L200183147

INFORMATION TECHNOLOGY

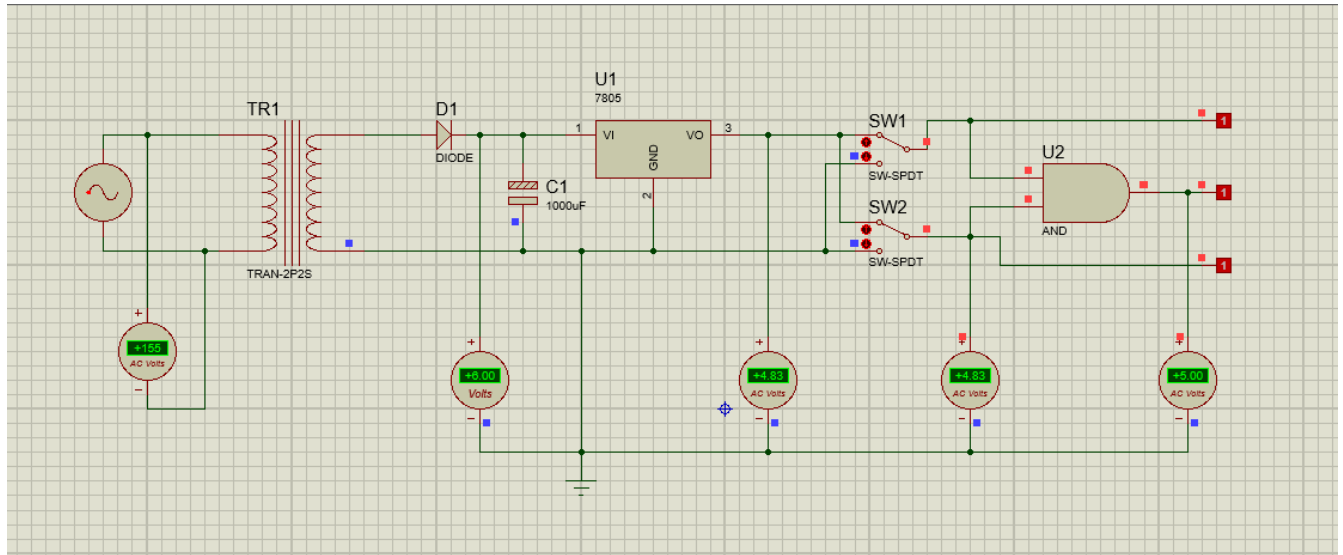
FACULTY OF COMMUNICATION AND INFORMATICS

UNIVERSITY OF MUHAMMADIYAH SURAKARTA

NIM : L200183147  
Name : Nur Annida I'ffah Supardi  
AssistantNname : Salsa Sasmita Mukti  
Date of Practicum : Friday, March 1st 2019

## Assignment

1. Create the circuit on the picture 1.21, and simulate with the click of a “*run the simulation*”!



2. Record your measurements!
  - a. Voltmeter AC : + 155 Volt
  - b. Voltmeter DC 1: + 6.00 Volt
  - c. Voltmeter DC 2: + 4.83 Volt
  - d. Voltmeter DC 3: + 4.83 Volt
  - e. Voltmeter DC 4: + 5.00 Volt
3. Answer the question below !
  - a. What is the difference voltage AC and DC ?
    - Air-conditioning voltage is easier to produce than dc tension.
    - Air-conditioning voltage can easily be changed and transmitted, but dc voltage is difficult to alter, therefore they are difficult to send.
    - Active components such as inductor, capacitor, transistor, and ammeter are responding to the ac voltage in a way different from the dc voltage, but it will block the dc signal while the inductor will do the opposite.
    - Clean areas under constraints – the time line from air – conditioning signals is zero to zero for a dc signal.
    - Underfloor air conditioning allows personal control of temperature.

b. How the character of the voltage at each voltmeter?

1. Voltage in an AC Voltmeter : (~~AC~~/DC) and has a character : positive unstable
2. Voltage in an DC 1 Voltmeter : (~~AC~~/DC) and has a character : positive unstable
3. Voltage in an DC 2 Voltmeter : (~~AC~~/DC) and has a character : positive unstable
4. Voltage in an DC 3 Voltmeter : (~~AC~~/DC) and has a character : positive unstable
5. Voltage in an DC 4 Voltmeter : (~~AC~~/DC) and has a character : positive unstable