Lab#1 Simple DC Circuits

This lab is based on Chapter 2 material to provide a better understanding of KCL, KVL, Ohm's Law (V=IR), and Power (P=VI) to complete pre-lab

Multisim

Please follow the steps below to setup the simulation environment and build your circuits

1. Setting up simulation environment
   - Simulate -> Analyses and simulation
   - Select "Interactive Simulation", then "Save"
2. Place component on the circuit board to build your circuit
   - Place -> Components
   - Change Database to Master Database
   - Change Group to <All Groups>
   - Change Family to <All families>
   - Type RESISTOR_RATED under Component, then click OK to place it on the board

   Repeat the steps above to place all components for your circuits

Circuit	RESISTOR_RATED	Power	GROUND (optional)
Fig (1.1)	2	DC_POWER	1
Fig (1.2)	2	DC_POWER	1
Fig. (1.3)	1+ - DUT = 15 kΩ resistor - DUT = 1N4148 forward-biased diode	DC_INTERACTIVE_VOLTAGE Set: - Maximum Value: 20 V - Increment: 1 %	1

   NOTE: Double click the component to change it value.

3. Placing multimeters
   - First instrument icon on the top right
   - Alternatively
   - Simulate -> Instruments -> Multimeter