Experiment # 6

Verification of Kirchhoff's Voltage Law (KVL) using Breadboard

Objective:

To verify Kirchhoff's Voltage Law (KVL) on Breadboard and know relationship between varying resistors and applied voltage.

Apparatus:

1. DMM
2. Resistors
3. DC power supply

Procedure:

1) Design the following circuit on breadboard

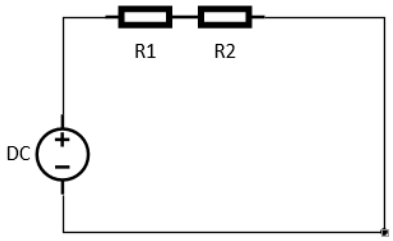

Figure 1 Circuit diagram

2) Using DMM find resistance of the resistors and note down in the table.
3) Find voltage of DC source and voltage drop on each resistor and note down in the table.
4) Add the voltage drops and compare with the source voltage by finding the percentage error.

Observation:

S.no	Vs (actual) (V)	R1 (Measured) (Ω)	R2 (Measured) (Ω)	V1 (Measured) (V)	V2 (Measured) (V)	V1+V2 (V)	Error	Percentage Error (%)
1.	5							
2.	10							

3.	15							
4.	20							
5.	30							