

# Lab Report guideline

- **Cover page:** course info, members' name, your name lab #, title, and date of submission
- **Implementation: Example:**

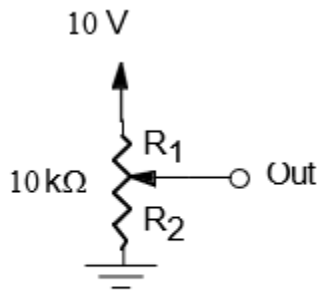
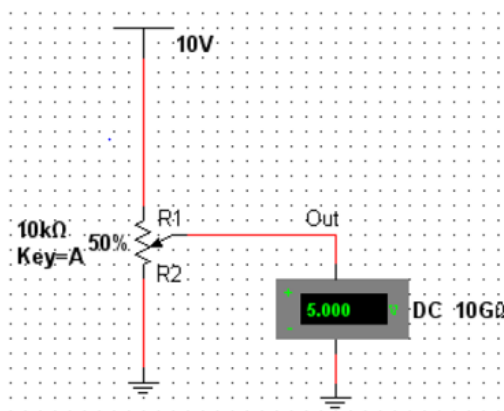


Fig 1a

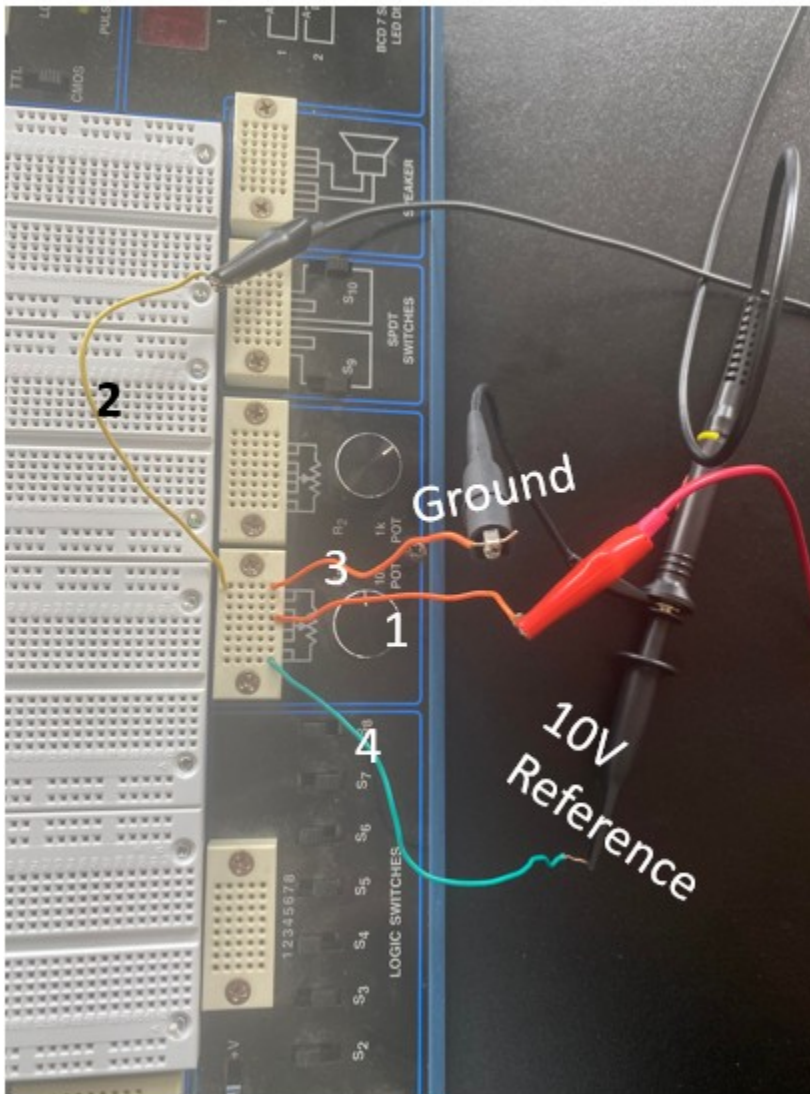
Show the implemented circuit of figure 1a (In Multisim or Actual depending on which one your group was assigned to do)

A brief description of the process you followed in conducting the implementation of the lab, **circuit figure**. If your group was assigned to do the experiment in Multisim, just describe which points are connected to which points. For example, consider the Multisim figure below, the top point of the 10kΩ potentiometer is connected to a 10V Reference voltage, while the bottom point is connected to the ground. **Since  $V_{out}$  is the voltage across the middle point of the potentiometer and the ground, the plus sign of the voltmeter is connected to the middle point of the potentiometer and the minus sign is connected to the ground.**

In Multisim, if you have an ammeter or a voltmeter or any devices used to measure, please describe how you connect them to the circuit and the reason of these connections (like I did for the Voltmeter above).



For actual experiments,

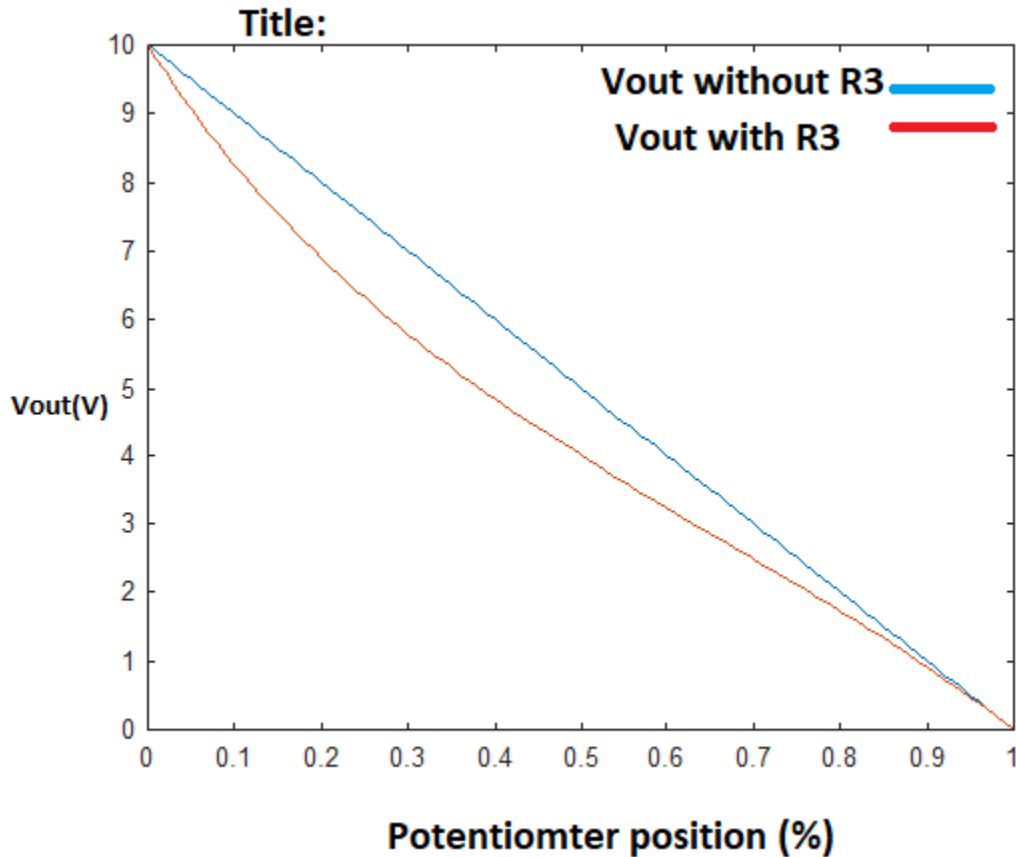


The Ground, the outer shield of the function generator cable, was connected to the bottom point of the potentiometer through the “3” wire. The 10V reference point is the core of the function generator cable and was connected to the top point of the potentiometer through “4” wire. The digital Multimeter was connected to the middle point of the potentiometer and the ground by “2” and “1” wires, respectively. The Multimeter was used as an Ohmmeter and a Voltmeter to measure the resistor and the voltage of the potentiometer between the middle point of the potentiometer and the ground. Whenever the Multimeter was used as an Ohmmeter to measure the resistor of the potentiometer, the Function generator cable was disconnected from the source.

- **Results: results obtained throughout the lab implementation, plot (if required),comment on your results, and comparison (if required)**

**Show your recorded measurement or data.**

For the plot, you **should label the axes** and it should **have a title**. If you have many plots on the figure, make sure you have a **legend**. If you forgot to label and put the title or the legend, you can copy the plot image to the Paint Software in your laptop. There is an option in Paint for you to add Text. Make sure readers be able to understand what you put in the plots without asking nay question. For example, like the figure below:



For the measured data, the plots, make some comments and comparison.

- **Questions:** Answers to the given questions at the end of the lab (if any)
- **Summary:** A conclusion that includes what you learned, difficulties you faced, and any suggested extensions/improvements to the lab