

Frequently Asked Questions (FAQs)

What do you need to do for the lab project?

For the lab project, you need to design a voltage divider and selector circuit, that gives output voltages of 10V, or 5V, or 3V. That means, your circuit should give 5V when 5V is selected and should give 3V when 3V is selected. Figure out how to design this kind of circuit.

Furthermore, high current is harmful for small electric and electronic circuits. That is why you should design the circuit in such a way so that the output current is less than 1A.

Record your work with the Problem Steps Recorder (PSR) tool:

Please do not forget to record your activity using PSR, to ensure academic integrity.

To run PSR, press Win+LogoKey+R, and press enter. Type psr in the run box, click OK, and click "start recording". When you are done, stop recording, save the zip file, and upload it with your project report and simulation files.

Is there any prescribed Project report format?

Yes, your project report will include (a cover page of course!)

- a. **Problem Statement:** Describe what problem are you trying to solve.
- b. **Design:** Describe the components, design procedure, testing, and troubleshooting.
- c. **Experimental Results:** Describe the simulation results if the results are satisfactory or not. Explain why it is satisfactory or unsatisfactory.
- d. **Conclusion and Discussion:** What did you learn from this project? What problems did you face? Can you compare your circuit to a commercially available voltage adapter (commonly known as a charger)? Why? Why not?

If you do not have access to a computer:

Sorry, in such a case, you can compensate for it by doing the project with hardware and write the report by hand. Of course, you need a computer with PSpice or Proteus installed to complete the project.

In a nutshell, three files need to be submitted.

1. Project report (PDF only)
2. Complete project files (PSpice or Proteus formats, in zip files)
3. PSR recording (Zip file only)

Where should you submit it?

Submit all the files mentioned above in the Assignment called "Lab Project" in Google Classroom.