Reminder: By returning this homework assignment you have agreed that you, in person, are fully responsible for the consequences of violating the rules of conduct. As a university student, you are expected to act maturely and responsibly. In short, **do not cheat!** Your submission will be checked automatically (and manually, if needed) for plagiarism.

Please remember to upload all the relevant files as a single zip archive on Moodle until November 13, Sunday 23:55. No late submissions! You must also hand in your report to your instructor on November 14 until 5pm. Your report must include the following statement and should be signed:
"I have neither given nor received any unauthorized aid on this assignment."

GUI FOR CIRCUIT SIMULATOR

Here is a chance for you to add a Graphical User Interface (GUI) to your own MATLAB-based circuit simulator!

Your GUI should:

1. Allow the user to select a file and load it,
2. Display the elements as a table with (at least) the following information:
    a. The identifier for the element ("type" (V, I, or R) and number)
    b. The connections for the element ("from" and "to" node)
    c. The value of the element
3. Display the solution
4. Allow the user to modify the values of the elements and run the simulation again.
5. Allow the user to specify a range of values (min, max and step size) for a single element and display the voltage of a single node as a function of the value of that element. For example, in the circuit given in Part A of the project, the user should be able to specify the value of R1 varying between 1 and 10 Ohms with a step size of 1 Ohm, and plot the voltage of node 3 as a function of the value of R1.

Always remember to have **comments** in your code and provide some "**help**" information to guide the users.