Exercises 4

1. Modify chapter04_solutions_problem3.py from the previous lecture so that it saves information from the experiment. Do this in two different ways. Normally you will choose just one of these methods for your experiment.

   (a) Add a line to the end of the experiment so that it saves the variable 'data' in a pickle file called 'data.pkl'. After you run the experiment, reload the data in this file.

   (b) At the start of the experiment, open a text file called 'data.txt'. At the end of each trial, write one line to the file that contains the values of each of the variables that the file currently adds to the 'data' list. Separate the values by commas. At the end of the experiment, close the data file. With these changes, the experiment doesn't need the 'data' list anymore, so delete the lines that create and add to that list. In the next lecture we'll see how to load the data from a text file like this, so in the meantime just open the file in a text editor to check that it contains what you expect. It's a good idea to check the data like this anyway, e.g., to make sure that values are being saved with enough digits after the decimal.