CS 250 Spring 2025

Homework Assignment 1

Due on Moodle: <u>Before class</u> on Friday, January 31. Mail submissions will not be accepted. Upload a single Jupyter notebook (.ipynb file)

- 1) Write a few lines introducing yourself. Include the following:
 - a) Your name, major and year
 - b) Your reason for taking this course
 - c) Your hobbies
 - d) Programming languages that you know
 - e) What you expect to learn from this course

[10 points]

2) Find <u>one</u> other person to form a project team of two people. Do not just write the name of an arbitrary person. Actually *talk* to the person and form a team. I can help you to form a team if you can't do it yourself. Explore Kaggle with your teammate and look up a problem you find interesting for your first project. Write a few lines explaining why you find it interesting. Choose as best as you can, although this choice may change before the actual project due to practical reasons. [10 points]

Write the above two parts in Markdown cells in a Jupyter Lab notebook file. In the same file, do the next question. You will get 10 more points if you can look up formatting syntax for markup cells on the Internet and use at least five things out of the following: headings, bullet points, numbered lists, bold text, italic text, underlined text, hyperlinks.

- 3) With the "avocado prices" dataset introduced in class, write code in Python that does the following.
 - a) Outputs a bar chart with the average year wise price of regular and organic avocados for each of the six years (two bars for each year)
 [10 points]
 - b) Outputs a line chart with two lines: the total volume of regular avocados sold per year
 for each of the six years, and the total volume of organic avocados sold per year for
 each of the six years.