COSC 410LA F25 Lab 1: Data Plotting and Hypothesis Generation

This lab is due **Friday, September 5, 2025 at 11:59PM.**

For this lab, you should submit your own work. You may and should discuss how to do things with those around you, but part of the point of this lab is to ensure we have a shared foundation.

Introduction

The purpose of this lab is to (re)introduce you to running Python notebooks with some of the libraries we will use throughout the semester. You will practice loading and analyzing data. By completing this lab, you will demonstrate that you understand:

- the basics of jupyter notebooks and pandas
- how to manipulate data and plot basic contrasts

Provided Files

- `Lab1.ipynb`: Python notebook with some introductory tutorials
- `Fall_2024_MBTA_Rail_Ridership.csv`: Data for exploration

Start Jupyter

Reminder, you can start Jupyter (from Terminal or Minforge Prompt):

```
conda activate ml
jupyter lab
```

This should load the python environment for this class and then `jupyter lab` will open up your browser to Jupyter lab with the contents of the current directory. If your browser does not open automatically, visit localhost:8888.

Make sure you are in the correct folder!

Submission

Upload the following files to Gradescope (with the output of your code cells saved):

- Completed `Lab1.ipynb`