Week: 13 Date: 4/20/2023

15-110 Recitation Week 13

Reminders

- Check6-2 due tomorrow (4/19)
- Full HW6 due next friday (4/26), no revisions
- Recitation Feedback Form

Overview

- ML Fast Facts
- Monte Carlo: Code Writing
- Data Visualizations with Matplotlib
- HW6 Check in's

Problems

ML Fast Facts

What is the difference between classification, regression, and clustering?

What is the difference between supervised and unsupervised learning?

T/F: A common step in machine learning is training on testing data.

Monte Carlo

Write a Monte Carlo Method to compute the expected number of units you will take in a given semester at CMU. Assume you take anywhere from 3 to 5 classes a semester and each class is between 9 and 12 units. Hint: you may want to import a helpful package!

Data Visualization Practice: Matplotlib

Recall the ice cream data from lecture that contains the top 3 favorite ice cream flavors of 110 students from the past 3 semesters. Using the starter code provided, write the following two functions to visualize the data:

1) Write the function makeFlavorDict(data) that takes in a 2D list representation of the data and creates and returns a new dictionary mapping the #1 favorite ice cream flavor of students to a count of its occurrences. Use the "#1 cleaned" column of this data for this problem.
2) Using the returned dictionary from the function above, write the function visualize(dict) that creates a bar chart for each ice cream flavor.