Week: 13 Date: 11/30/2023

| 15-110 Recitation Week 13 |
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**Reminders**

* Check6-2 due tomorrow (12/01)
* Full HW6 due next friday (12/08), no revisions
* [Feedback Form](https://forms.gle/MsTcE2TCpwYBvx7U7)

**Overview**

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

| Problems |
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# **ML Fast Facts**

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

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What is the difference between supervised and unsupervised learning?

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

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# **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!

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**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.

**HW6 Check-in**