Week: 12 Date: 11/21/2024

| 15-110 Recitation Week 12 |
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**Reminders**

* Check 6-2 due Monday (11/25) at noon, no revisions
  + Details about submission depend on your project, as explained on course [website](https://www.cs.cmu.edu/~15110/hw/check6-2_update.pdf) / Piazza
* Check 6-1 revisions also due Monday at noon
* Full HW6 due Friday after break (12/06), no revisions
* [Recitation feedback form](https://forms.gle/519bDVtMU6mGbH5JA)

**Overview**

* ML Fast Facts
* Monte Carlo: Code Writing
* Data Visualizations with Matplotlib
* HW6 Check-ins

| 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 returns a new dictionary mapping ice cream flavors in the “#1 cleaned” (i.e. students’ favorite flavors) column to a count of their occurrences.
2. Using the returned dictionary from the function above, write the function visualize(dict) that creates a bar chart plotting each ice cream flavor.