

# 15-110 Recitation Week 12

## Reminders

- Check 6-2 due Monday (11/25) at noon, no revisions
  - Details about submission depend on your project, as explained on course [website](#) / Piazza
- Check 6-1 revisions also due Monday at noon
- Full HW6 due Friday after break (12/06), no revisions
- [Recitation feedback form](#)

## Overview

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

# 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 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.