Lab 1

Due by the end of your lab session in Week 1

The purpose of this lab is to get familiar with Python.

Get up and running with an Anaconda Python 3.12 installation on your personal computer: https://www.anaconda.com/download

Requirements:

1. Define a function that takes an argument n and returns a list of odd numbers from [0..n]

2. Define a function to read the provided CSV file.

    a. Sort the list returned by the above function and return it. Hint: Use Python's list.sort() or sorted(list).

    b. Bonus: Instead of sorting by the first element (names), sort by the second element (ages). Google is your friend.

3. Define a function that counts the frequency of each character in a string and returns the most frequent character. It should run in O(N). Hint: Use a dictionary.

4. Import a module (math, time, collections) of your choosing. Use a function from that module in some way.

Useful resources on Python:

Google's Python class

The SciPy Lectures

Stanford Python Numpy Tutorial