

Lab 1

Due by the end of your lab section in Week 2

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

Get up and running with an Anaconda Python 3.9 installation on your personal computer:

<https://www.anaconda.com/products/distribution>

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 number of times all characters appear 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 Lecture Notes](#)

[Stanford Python Numpy Tutorial](#)