CS 343: Learning Python

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1 TASK

- Download python (2.7 or 3.x are both fine). Then, teach yourself python. You can start by checking this youtube playlist with python for jave programmers.

- Create a program that asks the user for an integer number "n", then asks the user for "n" integers. Once the user is done entering integers, your program outputs the one that is repeated the most. The program should be called most_times.py

- Create a program that reads a filename from the command line and tells me the number of words, characters and lines in that file. It must be called wc.py and must be run like so: python wc.py filename where filename is the actual name of the file to read.

- Create a program named stat.py that has the following functions:

  - avg: takes a list of numbers as a parameter and returns the average.
  - l_sqr: takes a list of numbers as a parameter and returns a list with the corresponding values squared.
  - var: takes a list of numbers X and computes

$$\sum_{x \in X} (x - \mu)^2$$

  where μ is the average of the numbers in X.

2 CRITERIA

- If the program is submitted as specified: 30pts.

- If the program compiles 10pts.

- each task is 20pts.

3 SUBMIT

One ZIP (not arj, rar, etc.) file with the three programs. Please respect all names specified above, including underscores and case.