Python Homework

## General Reminders:

* If you need an extension, you must contact Christie, not the instructor or TA’s.
* Each homework requires you to create a brand new **PUBLIC** github repository and you copy and paste that link into bootcampspot.
* All homework is due at 11:59 PM on the due date.
* After a 24 hour grace period, you will be docked half a letter grade for every week it is late.
* For a full understanding of the homework and what is required, look at the rubric.

## Python Homework

* From here on out, in order to grade your assignment, the graders will clone your github onto their computer and run your code (literally, they will type `python main.py` in their console).
  + That means for every assignment, unless otherwise specified, you MUST include all resources necessary to run your code (e.g., the csv files for this assignment)
  + This also means that paths must be **LOCAL**
    - *Hint:* If the path to your csv has `C:` or `Users/ ` or your name anywhere in it, it is not local.
* You will be using a csvreader object in your code, which is **DIFFERENT** from how you would work with a csv in VBA.
  + You will be iterating through rows again, but with the reader object, you can only go through the rows once AND you can only see a single row at a time.
    - You cannot do multiple **for** loops
    - If you are in the February row, you can look at the profits for February, but not the profits for January or March.
      * So if you need to know the profits for January, you have to “remember” January’s profit from the previous loop
      * *Hint: How do you “remember” a value in computer programming?*
* Whenever you are dealing with data we provide you, the first thing you must do is inspect the data and understand what you are dealing with.

## PyBank

* Each row in the csv is a month and that month’s ***profits***not revenue
* It is looking for the average **change** in profit, keeping the negative/positive (i.e., not absolute value)
  + e.g., change in profit from January to February would be (profit\_feb - profit\_jan).
* You must both print the results to screen and to a .txt file (**not csv**).

## PyPoll

* Open the csv. What does each row mean?
* The idea is that you have this csv, and you only want to keep track of the candidates who got votes, and you do not know who those candidates are; so, you have to ***programmatically*** find the candidates, ***not hardcode*** them.
* You need to both keep track of the candidates and keep track of the number of votes that go with that candidate, so you can’t just have a simple list. How might you do this?
  + *Hint: Day 2 House of Pies bonus or Day 3 Dictionaries*

## Class Activities to focus on

* Day 1: 08-Stu\_ConditionalConundrum, 09-Ins\_List
* Day 2: 04-Stu\_HouseOfPies, 09-Stu\_ReadNetFlixCSV, 12-Stu\_Udemy
* Day 3: 02-Ins\_Dicts, 03-Stu\_HobbyBook-Dictionaries

## References

* *Python\_Reference\_Guide.pdf* in Supplemental folder
* <https://www.tutorialspoint.com/python/index.html>
* <https://www.w3schools.com/python/default.asp>