Aarya Patil
CS 4395
Professor Mazidi
01/31/23

<u>Assignment Rundown: Portfolio Assignment 1 (Text Processing with Python)</u>

What the program does:
In this assignment, I was provided a CSV file of information on a list of employees which I had to read, fix, organize, and print out in a properly formatted manner. I designed a program with multiple functions to handle each of these requirements which includes I/O processing, user input, lists, and dictionaries.

How to run it:
To run the program, you need to provide a file path within the terminal. On a mac, which is what I have, you need to go into the terminal within PyCharm and type in the following: "python3 main.py data/data.csv". Since I created a data folder within my working directory that holds the data file, this command allows the program to access that file and use it to retrieve data. On windows, it's "py main.py data/data.csv". The only difference is you write py instead of python 3.

Strengths/weaknesses of Python for text processing:
The main strengths that Python holds regarding text processing all have to do with the methods and functions that are built into the language. Sys.argv, os.getcwd() plus the join(), split(), capitalize(), and re.fullmatch() are just a few that I utilized within my assignment. They make reading and processing files a lot easier as they simplify many processes that require blocks of code in other languages.
Python does not hold many weaknesses regarding text processing, but if I had to name one it would probably be something I mentioned as a strength actually. Sys.argv was pretty confusing for me to understand at first, so that may stump some first time Python users but after you figure it out, it definitely becomes a strength again.

What I learned from this assignment/what was a review:
I would say that all the aspects of this project that had to do specifically with text processing were very new to me, and I learned a lot about them. The regex section was also fairly new to me. I've worked with regex before in previous classes, but actually putting it into coding form was really interesting and honestly a little fun. The stuff regarding lists and dictionaries were all things that I had done enough practice on through the notes and had previously worked with when I was first learning Python basics.