

IS115 Introduction to Programming

Assignment #11

DO NOT share your answers with anyone. DO NOT collaborate on completing work with anyone. DO NOT use the Internet to search for solution to assignments. DO NOT pay anyone to write your code. Failure to meet this requirement leads to a violation of the academic integrity principles.

In **Python**, comment lines start with the # symbol. You may also highlight the text you want to be commented, click Format/Comment Out Region. Make sure to include comments throughout your code explaining the key steps of the program.

Write pseudocode and python code with output for the following. Please ensure that a screenshot of the output is attached to the document as advised in class.

Use **Python: Based on chapter 6 – Files and exceptions. DO NOT use arrays for this problem.** Write a program perform the following actions:

- a. Ask the user for a person's name and salary (salary can be a whole number or a decimal number).
- b. Don't allow the user to enter a negative number for salary.
- c. Use the **try/except** construct to display an error message, if the value for salary entered by the user has any characters in it. For example, 100.8 is a valid entry, but a100 is invalid. Make sure to ask the user for a valid input.
- d. Open an output file named **mydata.txt**, write the name and salary to the file and close the file.

You should now have a file named **mydata.txt** in your system.

- e. Ask the user to enter the name of any file, the user's name and email address. Write the data to the file. In addition, use a loop to write the numbers 100 down to 0 with steps of -10 to the file. Close the file. You should have a brand new file in your system.
- f. Open the file **mydata.txt**, read the name and the salary value from the file, display the name and the salary on the screen, and then close the file. Recall that you wrote to this file in part d, above.
- g. Define a **function** that accepts the name of a file. Inside the function, ask the user for the number of employees for processing employee data. So, if the user wants to process 5 employees, you allow data entry for 5 employees. Then, ask for a set of values for hours worked and pay rate and calculate pay for each employee. Assume double pay (2 times pay rate) for hours worked more than 40 hours. Calculate the total pay and the average pay. Write the total pay and average pay to a file whose name is entered by the user (make sure to ask for the file name). Ask for the file name in your main function and pass it to the function to perform its operation.