

SMC

OPS 807 Homework 2

In-class exercise/Homework, Python basics part 2

1. Rewrite the pay computation with time-and-a-half for over-time and create a function called `compute_pay(hr,rate)` which takes two parameters (hours and rate) and returns the pay.
2. Write a function that takes a numerical grade as an input parameter and returns the corresponding letter grade. Run the program several times and observe the output.
3. Define a string variable called `s1` and assign a value of 'spam' to it. Use a loop to print `s1` backwards.
4. Use the `sum` function from before and use it inside the f-string format operator to change the sum by changing the input parameters. Use 1, 2 first and then use 10, 20. You should see a different print out using f-string format without changing the format statement.
5. Rewrite the program that prompts the user for a list of numbers and prints out the maximum and minimum of the numbers at the end when the user enters "done". Write the program to store the numbers the user enters in a list and use the `max()` and `min()` functions to compute the maximum and minimum numbers after the loop completes.
6. Use the dictionary example in the slides as a starting point and sort the dictionary based on the values.
7. Include your code, the results and explanation of the results either as a Jupyter notebook file (.ipynb) or html (you can save your ipynb as an html) or screen shot of your plots and code if you are using Spyder IDE in a single file and upload to SMC MBA website.