HOMEWORK 1

COP3035 – Intro Programming in Python - Summer 2024

Due date: 5/24/2024

Instructions:

- Submit your answers to questions in a single consolidated PDF file to Canvas.
- Multiple submissions are allowed; however, only the final submission made before the due date will be graded.
- No late submissions will be accepted, make sure you plan to submit at least 2hrs before the deadline to accommodate for unexpected technical difficulties.
- Once you've finished the Jupyter Notebook tasks, export the notebook as a PDF using the export feature (don't send the original .ipynb file or change the extension).
- Make sure you submit the right file to Canvas. Wrong file submissions will not be graded.
- Note: Inquiries about homework must be sent to the instructors within 3 days after grades are published.

1. Python Version Verification: (20 points)

Create a blank jupyter notebook.
Start with a Markdown cell labeled "Section 1".
Open a terminal or command line in another window and launch a Python shell. As discussed in class, this action will display the installed version of Python on your machine.
For visualization only: Please copy and paste the resulting output of the terminal in a jupyter notebook cell, but don't run that cell.

2. Simple Python Script: (20 points)

Create a Markdown cell labeled "Section 2".
Using a text editor on another window, write and save a simple Python script named "hello.py" that prints "Hello, World!".
Execute the script from the command line.
For visualization only: Copy and paste both the content of the file and the resulting output in a jupyter notebook cell, but don't run that cell.

3. Print your name: (20 points)

Create a Markdown cell labeled "Section 3".

a) Add a code cell below. In this cell, use the print() function to display your name.
b) Follow it with another Markdown cell where you introduce yourself briefly.

4. **Variables: (20 points)**

Create a Markdown cell labeled "Section 4".

a) Add a code cell and assign the values 5, 10, and 15 to variables a, b, and c, respectively. To inspect the value of any variable, type its name in a new cell and execute it using Shift+Enter or the RUN button.
b) Add another code cell to calculate the average of these three numbers. Either assign the average to a new variable or directly print it using the print() function.

5. **Strings: (20 points)**

Begin with a Markdown cell labeled "Section 5".

a) In the following code cell, create three strings: your first name, middle name, and last name. Concatenate these strings to form your full name and print the result by merely typing the variable's name (simple inspection).

b) Add another cell and repeat the printing process, but this time, use the print() function. Include comments in the cell explaining the difference in the output, specifically, why one has quotes, and the other doesn't.

c) String Indexing: Given the string "PythonProgramming" as a variable, create a code cell that extracts and prints the word "Python".