CSC 110: Introduction to Computer Programming, Project 1

15 points

Project Goals:

- Introduction to programming in Python
- Use of modules (vs. the interactive shell) to save programs
- Utilize the Python **for** loop
- Start utilizing and evaluating online resources for Python.

1A. Search online for Python and or coding resources. Find one that you think will be useful, and post your link in the Project 1A discussion thread, along with a brief discussion of why you chose this particular resource. *Please use a site that has not been used by another student.*

[Submission of #1A done on Canvas Discussion Board for Project 1A] [2 pts]

1B. Utilize the IDLE shell to write a function that

- *Asks the user to input their name*
- *Uses a Python **for** loop to print their name 5 times on separate lines*

Next, create a module/script, entitled *repeatname.py,* to do the same thing when run.

[Submission of #1B as a .py file to Canvas course page, Project_1B] [5 pts]

1C. We have learned how to assign values to variables in Python:

e.g. sum=0 (the value stored in "sum" is 0)

We can then easily modify that variable:

e.g. sum=sum+1 (now the value stored in "sum" is 1)

*Use a **for** loop*, and utilize the index variable to write a program that will find and print the sum of the first 10 whole numbers from 1 to 10.

Modify the program to find and print the sum the first 100 whole numbers, 1 to 100.

Modify the program to find and print the sum of the first *n* whole numbers, 1 to *n*, where *n* is a natural number input, which the program requests from the user.

{Hint: Test your final code with small numbers first, *n*=2, *n*=3, etc, to see if it is working properly, and adjust as needed. Also recall that range(10) represents 0, 1, …, 9 so your code will need to adjust for that.}

Save your final program as *sum_n.py* and submit only the final version.

Input and output statements should be complete sentences.

[Submission of #1C as a .py file to Canvas course page, Project_1C] [8 pts]

For .py submissions it is good to get in the habit of using #comments at the start of the program, and also within the body to describe required inputs, the process and outputs (IPO).