INTRO TO PROGRAMMING (PYTHON)

ASSIGNMENT 01

Overview

In this activity, you learn about creating and using a Python script.

This assignment includes the following tasks:

1. Watch the module videos.
2. Read a book chapter.
3. Review some web pages.
4. Watch additional videos.
5. Apply your knowledge.
6. Document your knowledge.
7. Submit your work.

We are trying to answer the following questions:

- How is python used?
- What are some differences between python and operating system shell scripting?
- How do you run a python script from your desktop?
- How do you run a python script from a command shell?
- What is a console application?
- What is a python script?
- How do you know if python is working?
- Does the python code look different on different operating systems?

Assignment Steps

The following assignment steps ask you to read about, perform, and write about programming.

*Note: Course assignments help you learn through **reading, watching** demonstrations, **performing** programming in Python, and reflecting on what you learned through **writing**. You are strongly encouraged to continue your learning by experimentation.*

Step 1 - Watch the following videos

Please watch my course videos. You can find the course videos **link on Canvas**.

Step 2 - Read a book chapter

Please **read chapter one** in your textbook. You **do not have to perform the exercises or type in the code**, but it is best if you open the script files as you read about them. You can find the downloadable **book files on Canvas** for your convenience.

Step 3 - Review the following web pages

Please review the following web pages:

1. https://www.computerhope.com/jargon/c/commandi.htm (Windows) (external site)
2. https://www.davidbaumgold.com/tutorials/command-line/ (Mac)
3. https://www.w3schools.com/python/python_getstarted.asp

Step 4 - Additional Videos

There are lots of free videos on the internet, and sometimes it helps to see how other people explain the same topic. So, please watch these:

1. Using Python interactively https://realpython.com/lessons/running-python-code-interactively/(external site)
2. Print and Input https://youtu.be/FhoASwgvZHk (external site)
3. Python Tutorial for Beginners 1: Install and Setup for Mac and Windows https://www.youtube.com/watch?v=YYXdXT2l-Gg&vl=en (external site)
4. Introduction to Batch files https://youtu.be/rhV4L3T3BMc (Windows) (external site)
5. Introduction to Bash files https://youtu.be/nZqi3BqqeqI (Mac) (external site)

Step 5 - Apply your knowledge

Now that you have reviewed the websites and videos, I want you to do some programming with the Python language.

Step 5.1 Create a Python Script

Create a python script file that allows a user to input their name and display it back to them.

Note: Mac comes with Python 2 already installed, but please install and use version 3.x for this course.

Step 5.2 Save your script to a folder

Create a folder on your computer **called _PythonClass**. Please use the **C: Drive** on a Windows OS **or** the **Documents** folder on a Mac OS (using the Desktop on either OS is <u>not</u> recommend).

Inside this folder **create another folder called Assignment01** and save your script file into this subfolder **as test.py (Figures 1 and 2)**.
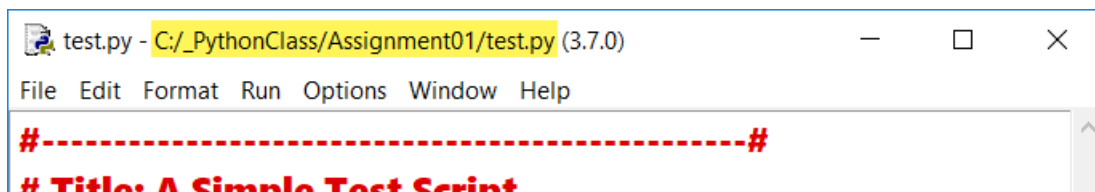

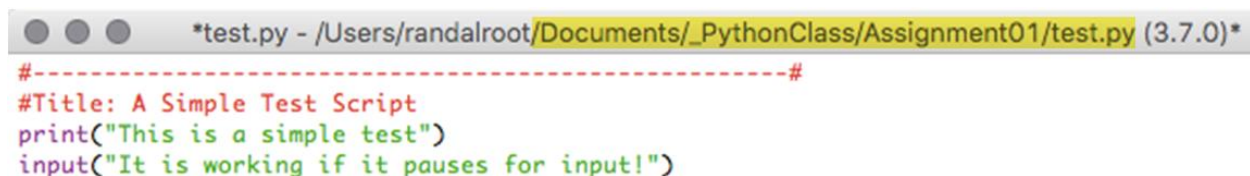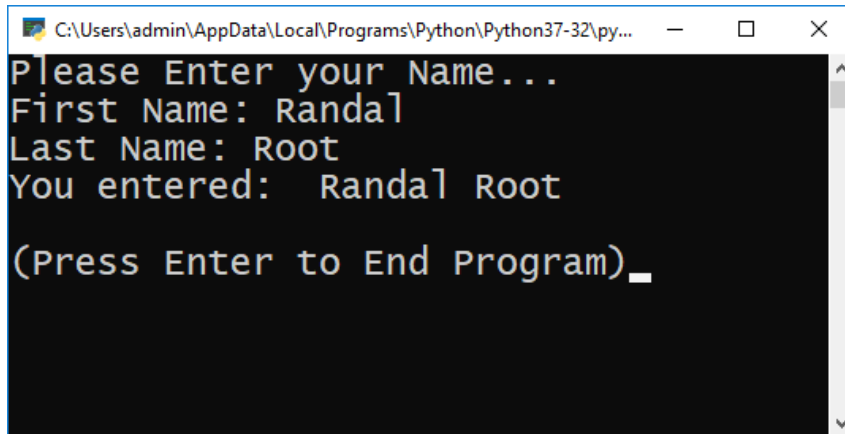*Figure 1: Idle showing the file saved in the correct folder on Windows OS*

Figure 2: Idle showing the file saved in the correct folder on Mac OS

Step 5.3 Run Your Script

With the script created and saved in the proper location, run the script in an OS command/shell window, and then capture an image of it working on your computer (Figure 3).

Figure 3: An example of the script running from a command shell.

Step 6 - Document your knowledge

After you have created and tested your Python script, create a document describing the steps you took in performing this assignment.

Note: Make sure you put it in the proper, professional level, formatting! It does not have to be perfect, but if you turn in a simple blob of text, you won't get credit for it! Here is a link that may help you understand what I am looking for: Creating Professional Documents (External Site)

Step 7 - Submit your work

Now place your document with the Python script in the Assignment01 folder, then Zip this folder into a ".zip" file, before finally uploading the file to the class assignment page on Canvas.

Congratulations! You're done!