
Project 1

COP 3035 Fall Term 2019

Point Value: 100 points

Project Due Date: 11:59 PM on Tuesday 9/10/2019

This assignment is essentially an exercise that will help you get started working with Python programs using the Python 3 software. In this assignment, you will enter a Python program which we provide to you, personalize it by filling in your name and other identifying information where needed, fix all errors which are present, interpret it and run it. The program that you must use is provided to you on the class web site. Note that the program, as provided, deliberately contains several errors. Specifically, the program may contain one or more *syntax* errors and/or *semantic* errors. When you finally run the program, you must edit it, test it and work on it until it runs 100% correctly.

Part or all of this assignment may be completed during your first recitation meeting as well as on your own.

Learning Objectives

- To gain experience editing, fixing simple errors, interpreting and running a provided Python program using the required software
- To learn how to utilize comments in a first simple program, including providing identifying information
- To practice how to turn in your program to the course Canvas site correctly, and to verify that your file was submitted correctly, all according to the project due deadline

Obtaining the Python Program from the Class Web Site

First log on to the Canvas site for this course. Under *Assignments*, you will find *Programming Assignment 1*. In this section, you will find all the needed files. Click on the link to the file named *program1.py*, and you may view that file. You will need to save and process this program using the Python IDLE following course instructions; see below. The TAs will be demonstrating how to do this in recitation and the teaching staff can also help you during office hours as needed.

Saving and working on your Python program

Save the program file to your local file space to work on it. You may also choose to use copy and paste to obtain the program code. Follow the instructions provided in Appendix

A and B of the required Gaddis course textbook to install Python 3 and to work with the Python IDLE.

Interpreting and Running Your Python Program

When a program is interpreted, it is translated into object code and executed, essentially line by line. Syntax errors will cause the Python software to list error messages, informing you on what line in the program the syntax errors occurred. You must edit the program to eliminate all syntax errors in order to run it to completion.

Run the program as described in class and in your textbook.

In this project, you are entering the data *interactively*. When you are prompted for your input values, type them in and press ENTER after each one. Notice that the IDLE window displays both your input and the program's output.

The program as provided will produce correct output once minor errors have been fixed. Test it with various input values and check if the output is correct or not for various inputs by making comparisons using a calculator.

If a program is correct but incorrect input values are given during a run, errors often occur. You must re-run the program in this case until input values are correctly entered, and the correct output is produced. If a program is not coded, typed or entered correctly but it still runs, it may produce the wrong output. If this occurs, edit the program to fix any semantic errors, which are often errors in the calculations being performed.

Make sure that you save the program file in your own file space, so you can work on it at another time and also turn in your program file for credit. Save files on a USB flash drive, and/or in university file space, or in other secure, protected locations. Be careful not to save your work in public file spaces! Remember, *backup copies are required in this course*.

Quitting the Python IDLE

Always quit the Python IDLE program before trying to submit your program file with Canvas, otherwise submission errors may occur.

Sample Program Output

You will find an example of correct output from a correct version of the program on the class web site for this assignment.

What File To Turn In, File Naming Requirements, and How to Turn In Your Work using Canvas

You must turn in your Python program source file which must be named as follows (note that you will have to rename the provided file!):

Use this format: *yourLastNameLowerCase_FSUID_p1.py*

Your FSUID will be unique to you, will typically be your FSU email ID, and will be something like "ab23c." Hence file names will look something like "smith_ab23c_p1.py"

Submit your Python file (.py) to Canvas using the Submit button for this assignment. Be sure to download the file after you submit it in order to check that you submitted the correct program file to Canvas and that it was successfully received by Canvas.

Last Update: A. Ford Tyson 7/25/2019
