**[Tutorials and Homework](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950076_1)**

[Tutorials and Homework](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950071_1)

Programming Projects are end of chapter exercises that demonstrate your understanding and ability to apply the chapter concepts to a given scenario. If you haven't done so already, you should read chapters 5 through 7 of your textbook.

NOTE: When completing projects in Python for submission in Blackboard, be sure to name the exercise as instructed in the assignment details in this folder.

**Project Assignment Exercise for Module:**

M1T (due 8/23)

M1T2 (due 8/30)

M1LAB1 (due 8/30)

M1LAB2 (due 9/7)

Remaining assignment due dates are 9/7.

M1HW1 Numpy Array Creation

M1HW2 DataFrame Creation

**Flask Information**

FYI:

Flask Homepage: <https://flask.palletsprojects.com/en/2.0.x/>

### [M1T1 - Orientation](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5951973_1&course_id=_35059_1&group_id=&mode=view)

**This assignment is due by 8am Monday 8/23. Completing it by the due date is mandatory for continued enrollment in the class.**

In the past we've used the first mandatory assignment as a "getting to know you" post -- this is similar, but using Python.

**Instructions**

Using your choice of Python development environment (Anaconda, IDLE, repl.it, etc.), create a program that meets the following requirements.

The program should be named **M1T1\_Lastname.py**, with your own last name replacing "Lastname". (10 points)

The file should begin with the standard FTCC program header (10 points). Here's an example as a reminder.

// CSC 221  
// Assignment Name (M1T1 in this case)  
// Your Name  
// Date

The program should print at least three lines of text when run (70 points).

* Your first and last name
* What languages (including Python) you are currently studying this semester
* Any additional information about yourself you'd like to volunteer -- job, hobbies, interests, etc.

Finally, ZIP this file (10 points) into **M1T1\_Lastname.zip** (again, with your own name instead) and upload it to complete this assignment.

### [M1T2 - GitHub Repo](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6037626_1&course_id=_35059_1&group_id=&mode=view)

Create a GitHub repository for CSC 221 as instructed. Submit the URL of your repository as text.

### [M1LAB1 - Python Review](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5952087_1&course_id=_35059_1&group_id=&mode=view)

**M1LAB1 - due 8/30**

This assignment will be discussed in class our second meeting. We'll be warming up with some simple menu-based programs.

**Double A Number**

Similar to the "Basic Calculator" you may be working on for 285, but with much less functionality. This will give us a chance to review menu-based text user interfaces in Python.

**Requirements**

Bronze (max 80/100): The program should ask the user for a number. It will then return that number, doubled.

Silver (max 90/100): After each result is displayed, the program should ask the user if they wish to repeat (through a text menu such as : 1. Enter another number 2. Exit). The program should repeat until the user selects to exit.

Gold (max 100/100): Each result should be kept in a list. The entire list of results should also be displayed on exit.

Optionally: a menu option should be added to display the entire list of results so far.

### [M1LAB2 - Visualization](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6046866_1&course_id=_35059_1&group_id=&mode=view)

**M1LAB2 (due 9/7)**

We'll be completing this assignment in class. Please note that the setup for this assignment is a little different than normal -- it's running from ipython in the Anaconda prompt, not through Spyder. We'll go into specifics.

You'll want to complete **5.17.2 Visualizing Die-Roll Frequencies and Percentages**, specificall pages 193-198. (The next step on 199 is optional -- you only have to do 193-198.)

In this assignment we're using matplotlib and numpy libraries.

Video Walkthrough: <https://youtu.be/aFjozKDD5MU> (opens in new window)

### M1HW1 - Array Creation and Manipulation ( Assignment Instructions)

[M1HW1 - Array Creation and Manipulation ( Assignment Instructions)](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950076_1)

Open the link below to view for M1HW1 Array Manipulations assignment instructions

[M1HW1 Array Creation and Manipulation (Assignment Instructions)](https://faytechcc.blackboard.com/bbcswebdav/pid-5950080-dt-content-rid-54266594_1/xid-54266594_1) [M1HW1 Array Creation and Manipulation (Assignment Instructions) - Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950076_1)

(Opens in new window)

[**M1HW1-Array Creation**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5950083_1&course_id=_35059_1&group_id=&mode=view)

**Instructions**:

Download instructions from post above ( **M1HW1 Array Creation and Manipulation** (**Assignment Instructions)**)

**Submit** your finished code solution file(s) through this assignment link by the posted deadline

**M1HW2-DataFrame Creation (Assignment Instructions)**

[M1HW2-DataFrame Creation (Assignment Instructions)](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950076_1)

Open the link below to view for M1HW2 assignment instructions

[M1HW2 Dictionary Manipulation (Assigment Instructions)](https://faytechcc.blackboard.com/bbcswebdav/pid-5950084-dt-content-rid-54266596_1/xid-54266596_1) [M1HW2 Dictionary Manipulation (Assigment Instructions) - Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950076_1)

(Opens in new window)

[**M1HW2- DataFrame Creation and Manipulation**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5950086_1&course_id=_35059_1&group_id=&mode=view)

**Instructions**:

Download instructions from post above ( **M1HW2 DataFrame Creation and Manipulation** (**Assignment Instructions)**)

**Submit** your finished code solution file(s) through this assignment link by the posted deadline