# ITP 100: A Guide to Project Preparation and Submission

Many students often jump right into writing their Python code, missing crucial first steps. The purpose of this handout is to show students how to create, save, and submit projects in Canvas for ITP 100.

The first thing to know is that for most projects that are assigned throughout the course, there are four sections that are needed for submission:

- The pseudocode, which can be written in a single Microsoft PowerPoint or Word document.

- The flowchart, which can be included in the same file as the pseudocode.

- The program code in a Python file.

- The program code in a text file.

In addition to knowing how to create each part of the project, it is also important to know how to submit each file.

You can navigate to specific sections of this handout by clicking the links below.

**Pseudocode and Flowchart**

It is always best to begin with the pseudocode and flowchart. They have been created in this sample Word document with the pseudocode on one side and flowchart on the other.
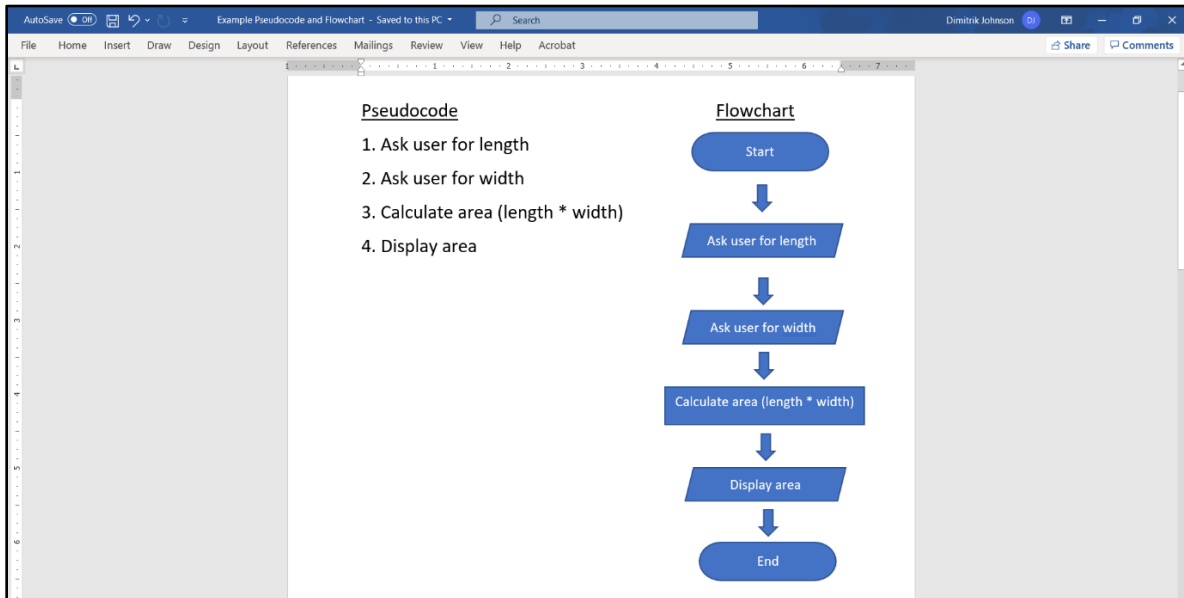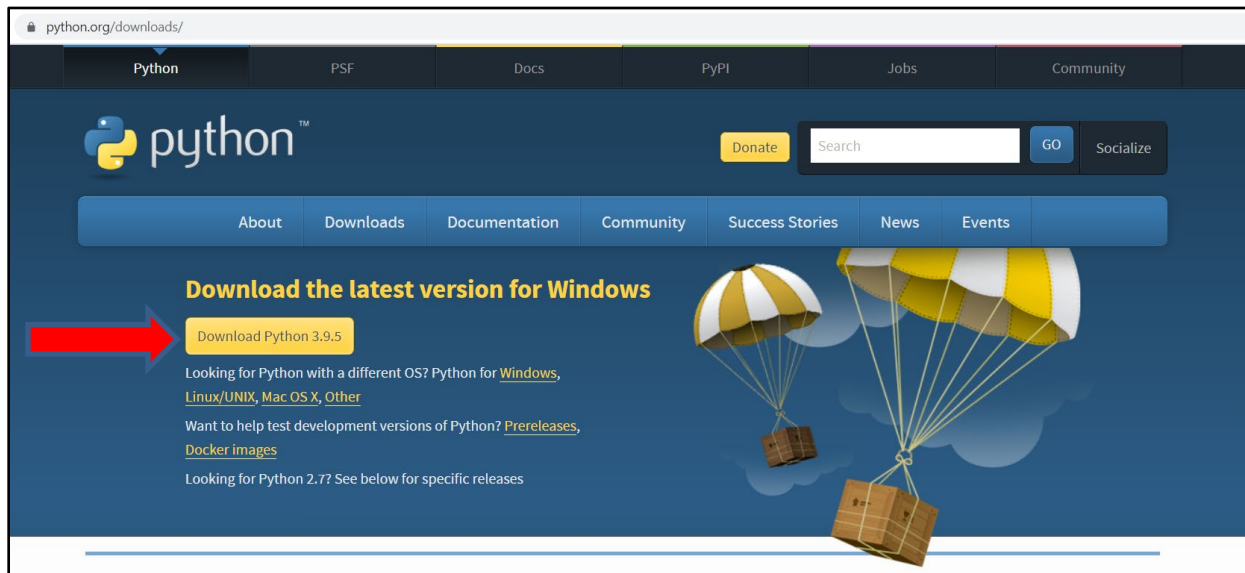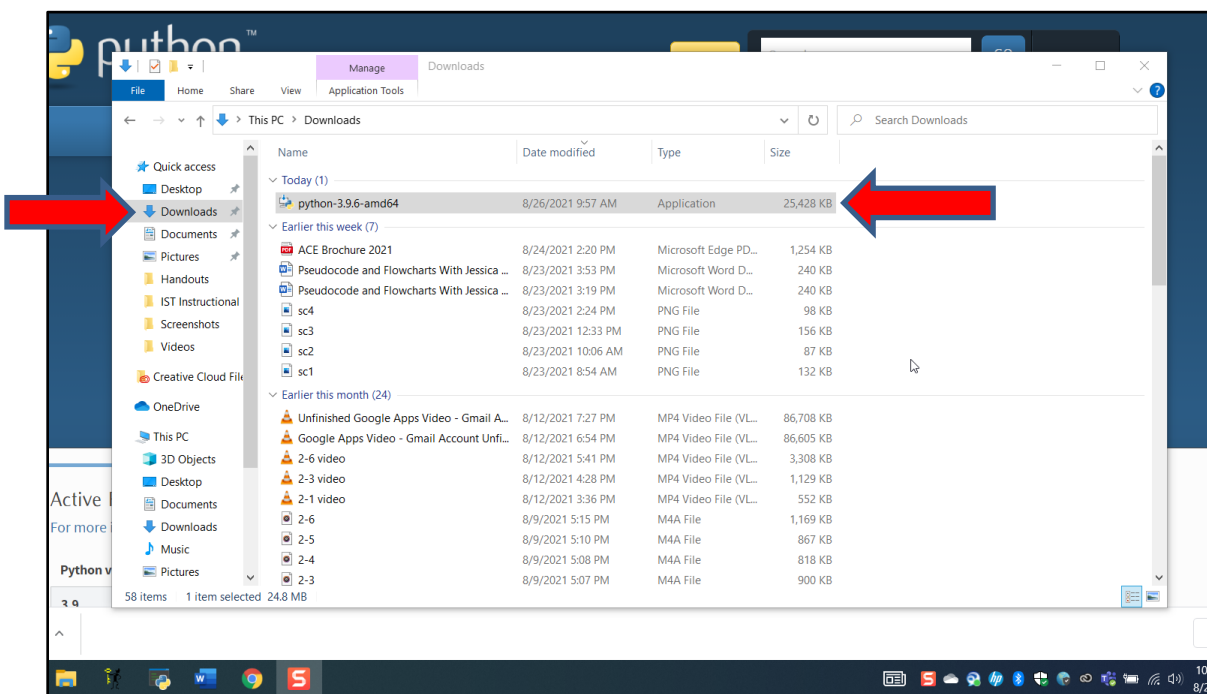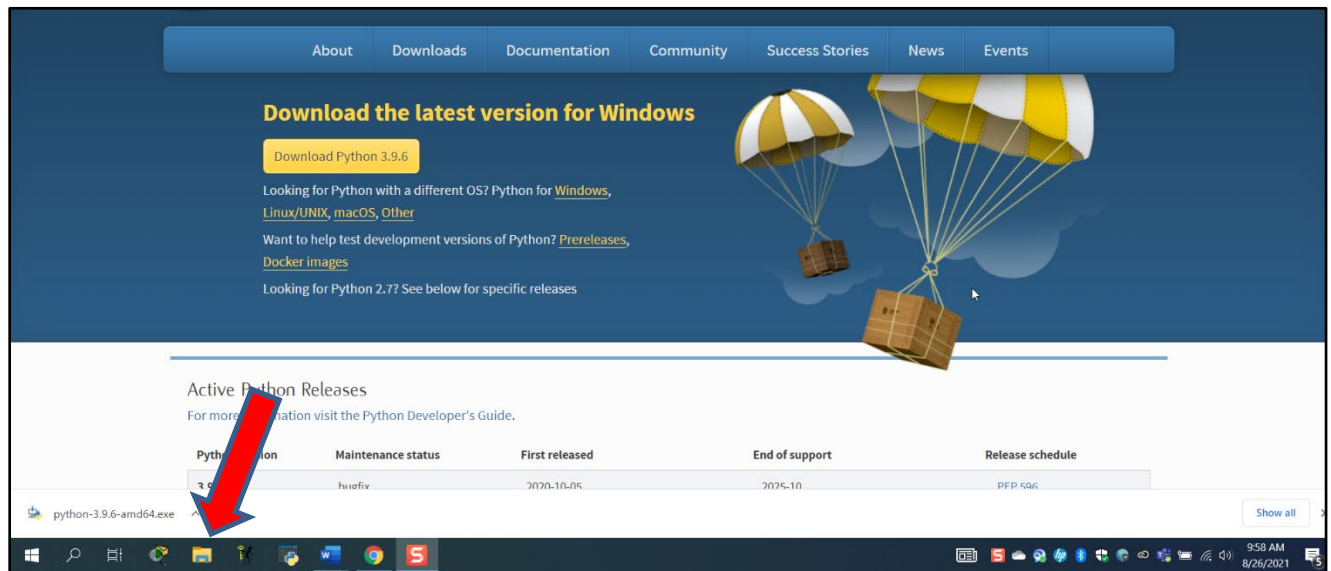


**Python**

After developing the pseudocode and flowchart, the Python code can be developed. In ITP 100, the integrated development environment (IDE) that is used is IDLE. In order to use IDLE, Python has to be downloaded, which will include IDLE in the package. There are three steps that need to be followed in order to download Python. First, go to Python's website, python.org. Then, click on the "Downloads" tab.
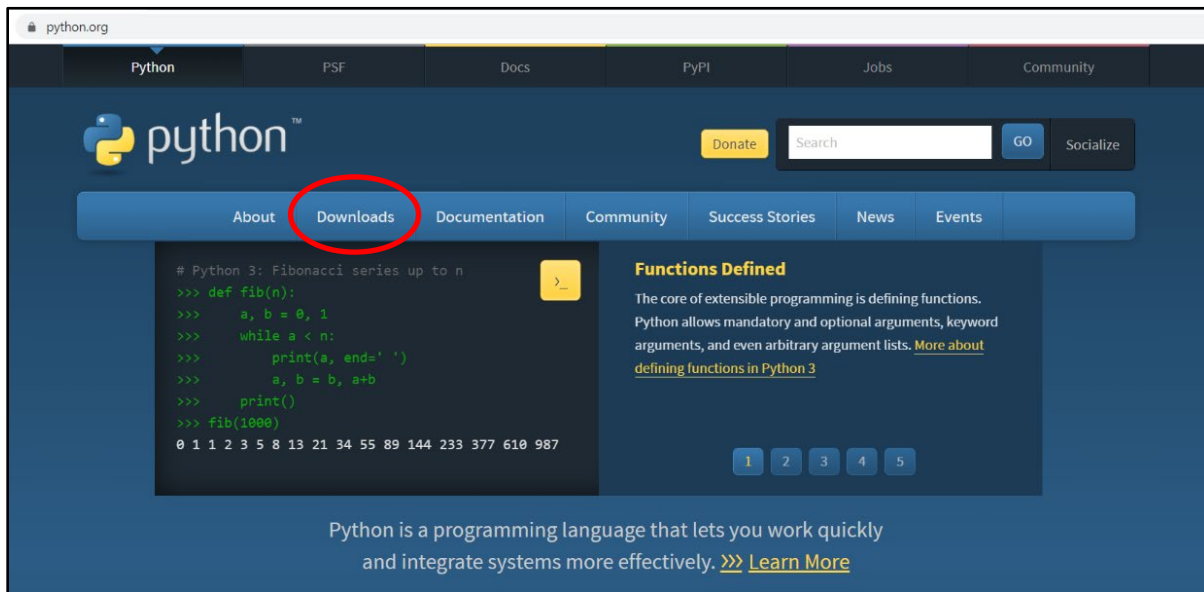
Finally, click the yellow "Download Python" button. The numbers after the word "Python" indicate the current version of the language.



When the download is complete, Python can be installed. To do this, click the computer's "File Explorer" icon and navigate to the "Downloads" folder. Then, double click the file that was downloaded.

After the file is opened, the "Install Python" window will appear. In this window, check the "Add Python to PATH" checkbox, and then click "Install Now" to begin the installation process.
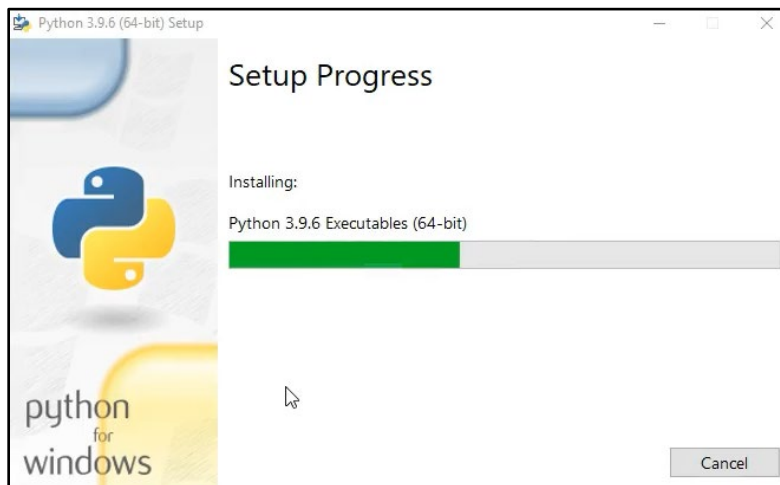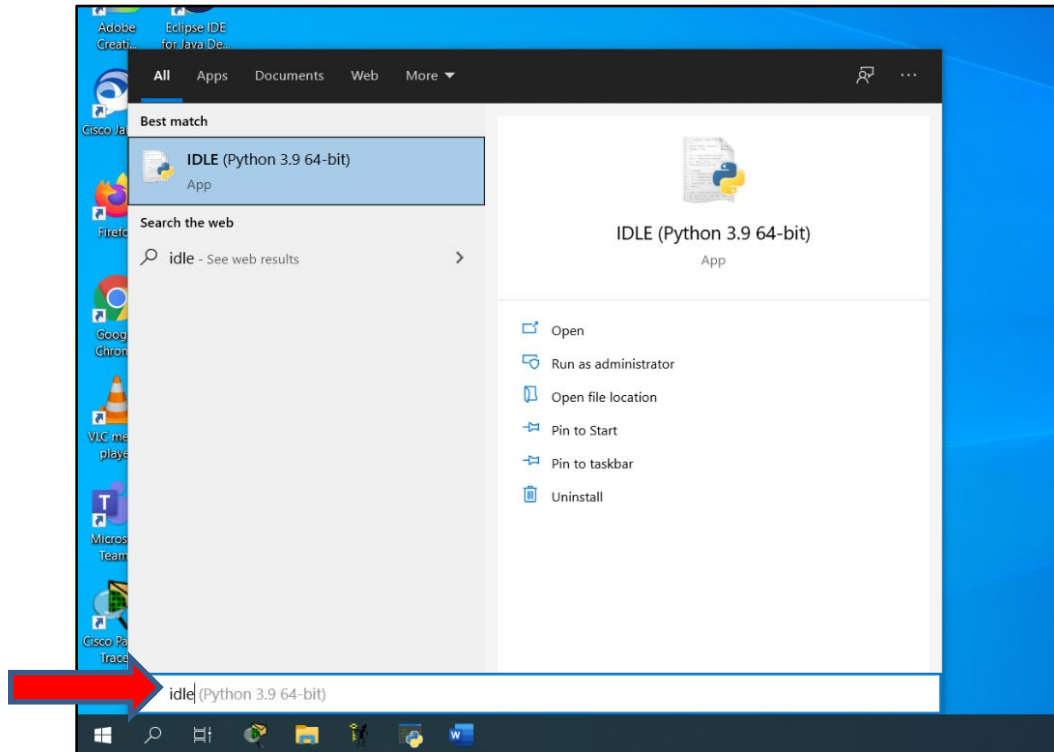
The setup will take time to complete. When it finishes, close the window by clicking the button that is labeled "Close."
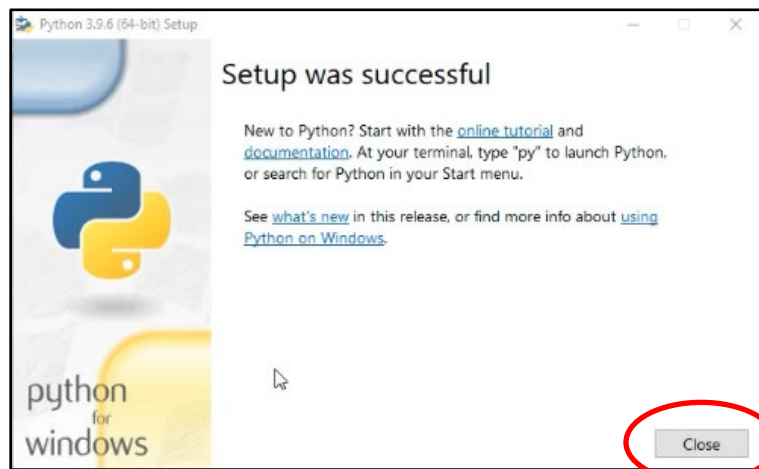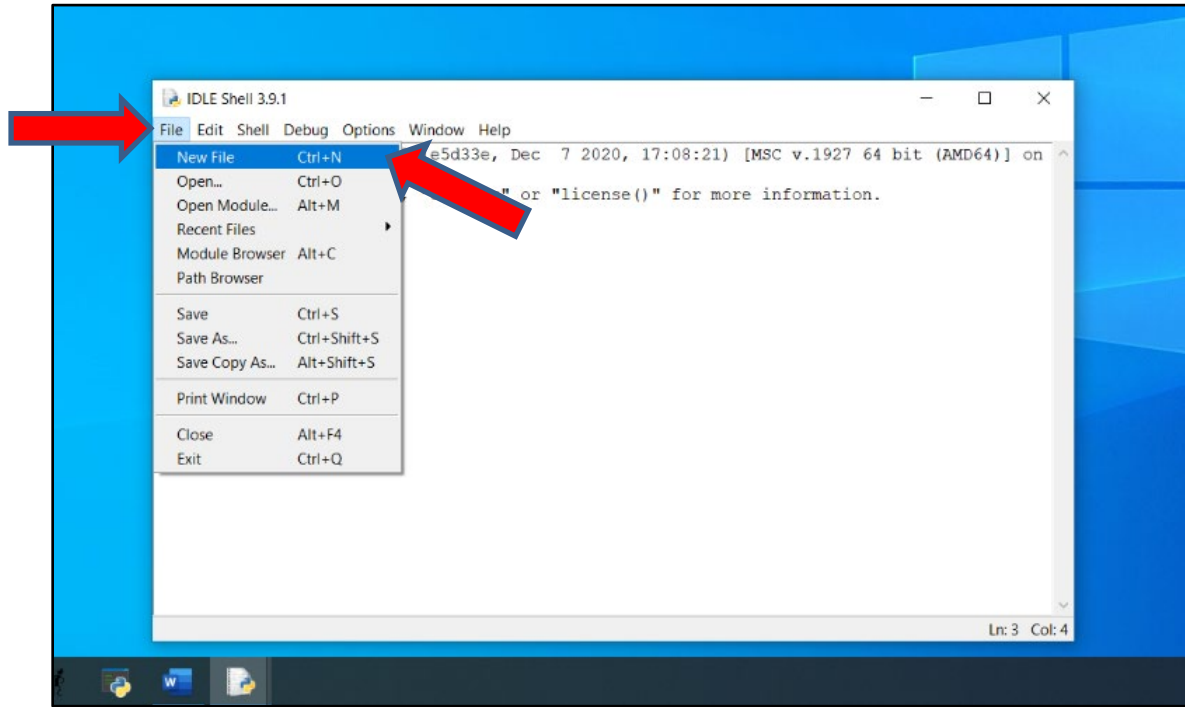
**IDLE**

When the download and installation are complete, open IDLE. To do this, move the cursor to the computer's search feature, type the word, IDLE, and select the first option that is given.
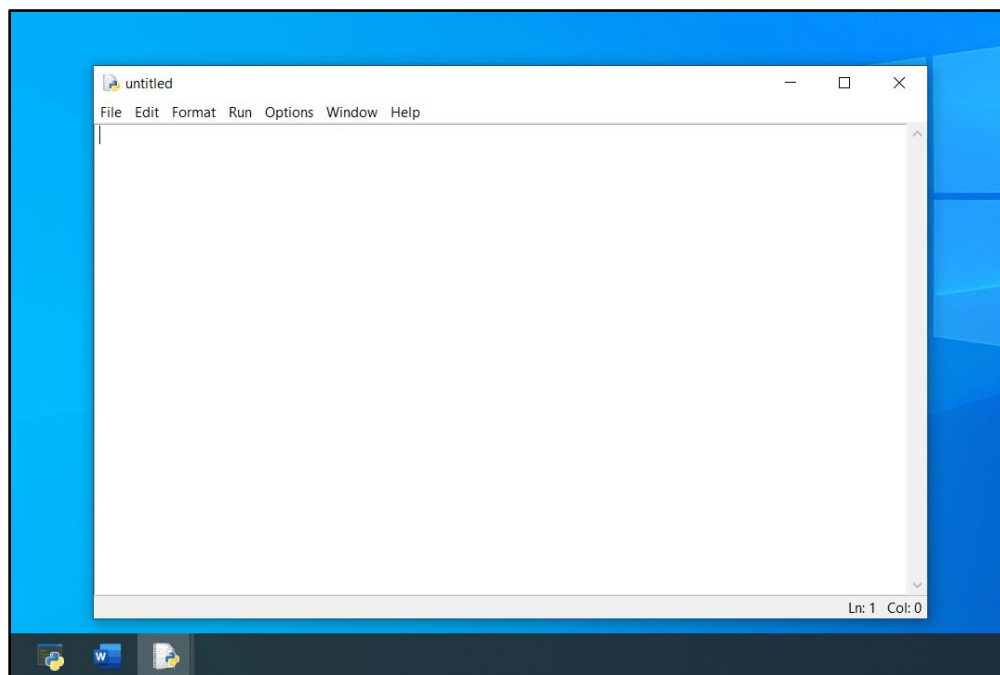
After opening IDLE, the window that will appear is called the Python shell.
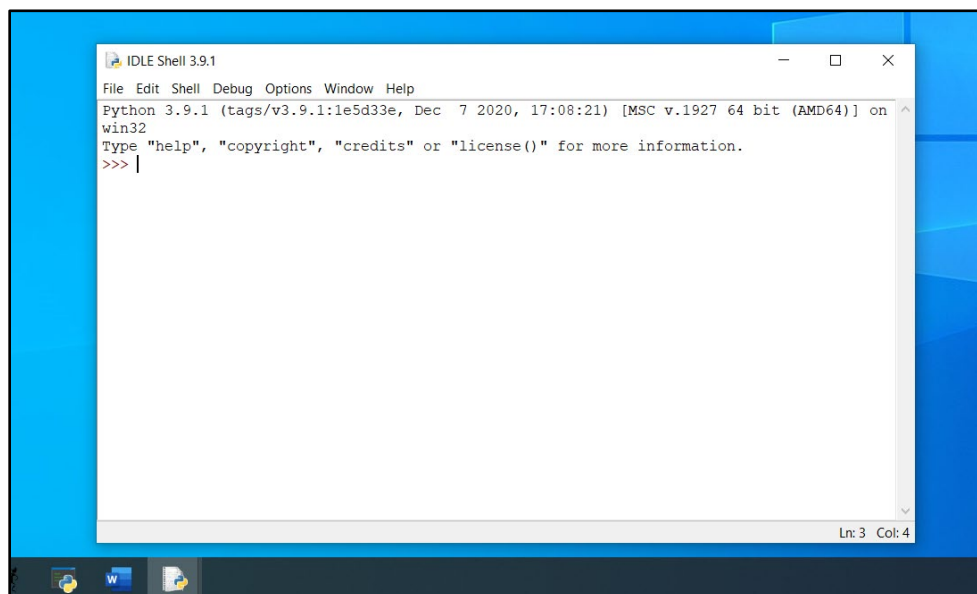
Rather than writing the Python code in the shell, click on "File," move the cursor down, and then click on "New File."



The blank page that appears is where the Python code should be written.

**Saving the Python File**

After writing, running, and adding comments to the code, save the file to a location that is easy to access. To do this, click on "File," "Save as," create a file name that ends with ".py," and click "Save." An example of a correctly named Python file would be: example1.py.
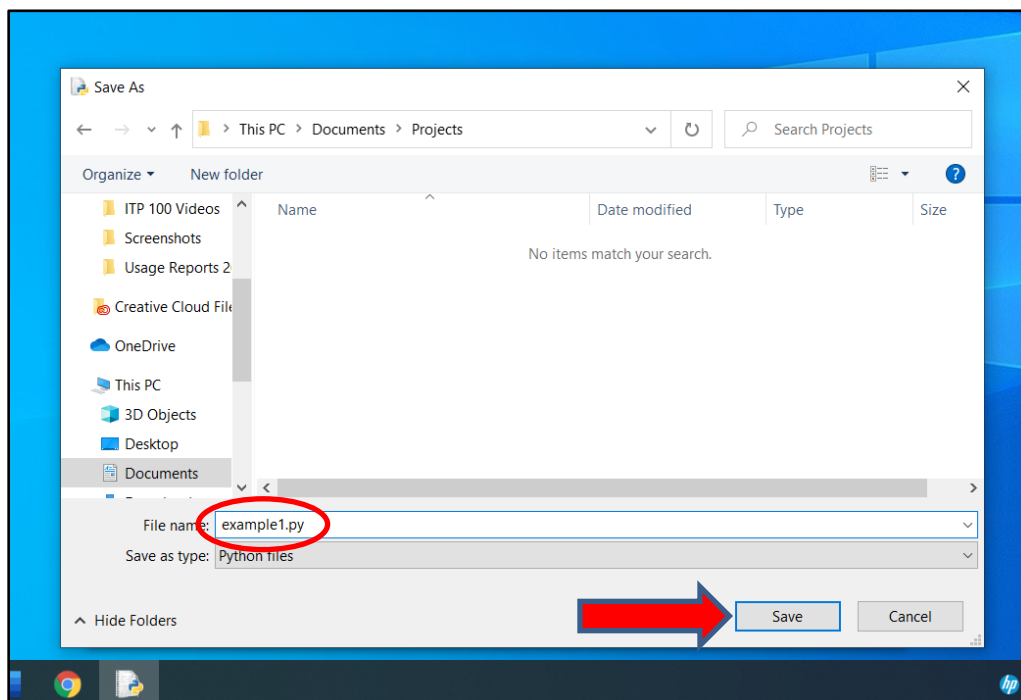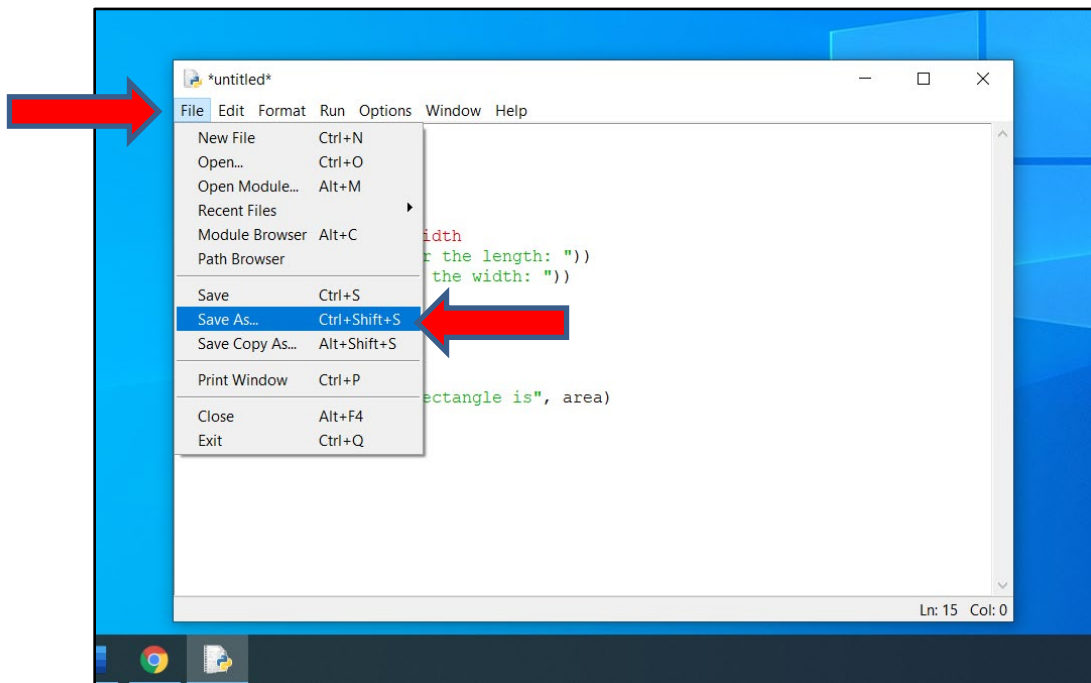
## Text File

The last file that needs to be created is the text file. The content for this file can be written in any text editor, such as Notepad for Windows devices or TextEdit for Apple devices. To create this file, copy the text that was written in the Python file, paste it in the text editor, and save it with the ".txt" file extension.
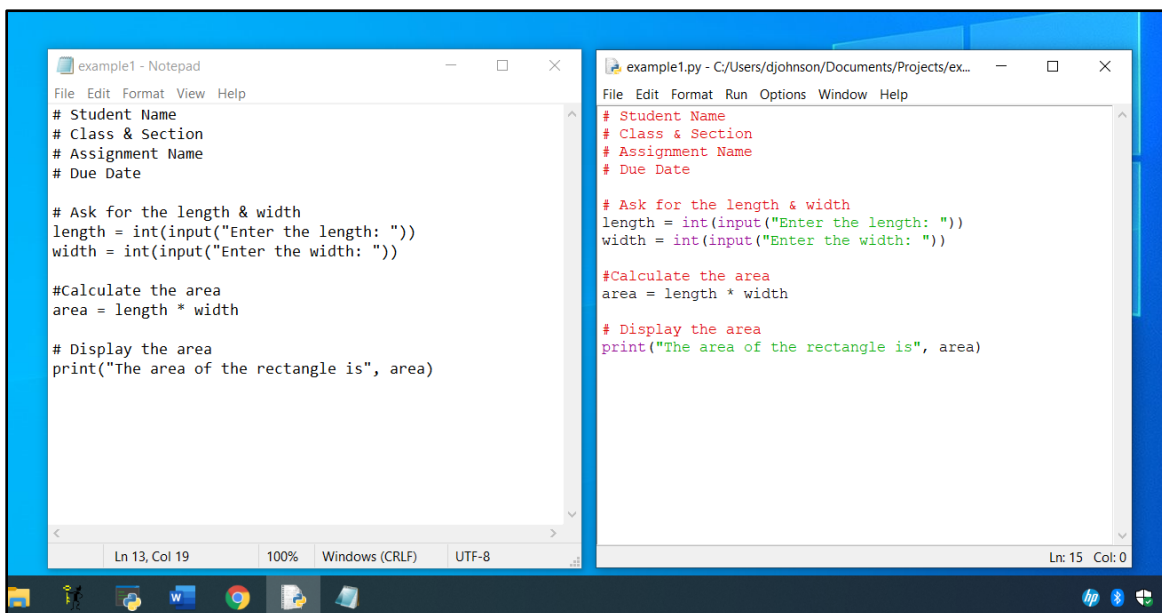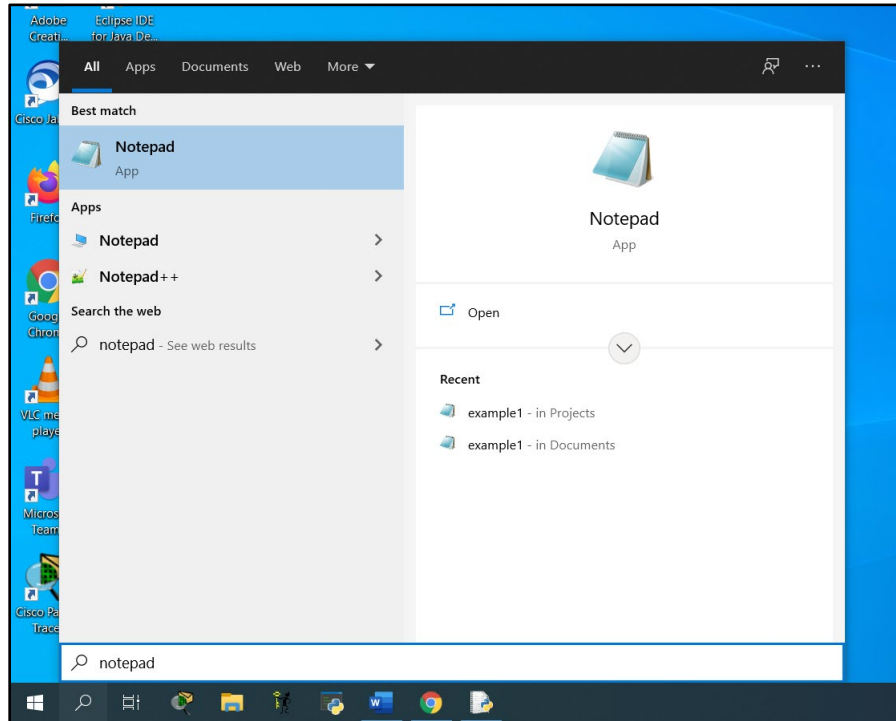
**Canvas Submission**

To submit the files in Canvas, navigate to the project's submission page. Then, click the "Start Assignment" button, select "upload file," and click on "choose file." Next, navigate to the location where the project files are saved, and then select one of the files for submission. The next few screenshots will illustrate the process.

To add the other files to the submission, click the "Add Another File" link, which allows students to choose another file. Then, follow the previous steps to add the rest of the files.

Before hitting the "Submit Assignment" button, ensure that all three files that are needed for submission have been added. The files should contain the pseudocode, flowchart, the program code in a Python file, and the program code in a text file.

The Academic Center for Excellence (ACE) offers free on-campus and online tutoring appointments for software design. For further assistance with programming concepts, please call ACE at (540) 891-3017 or email ACE@germanna.edu.