

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: pg. 2

Python: pg. 2

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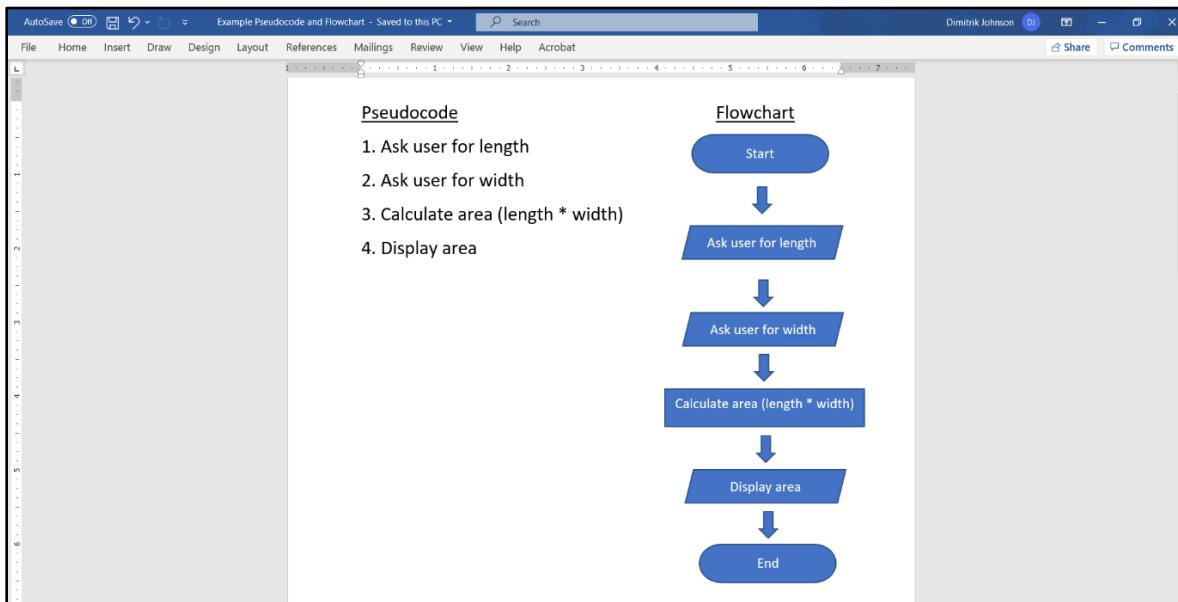
Saving the Python File: pg. 8

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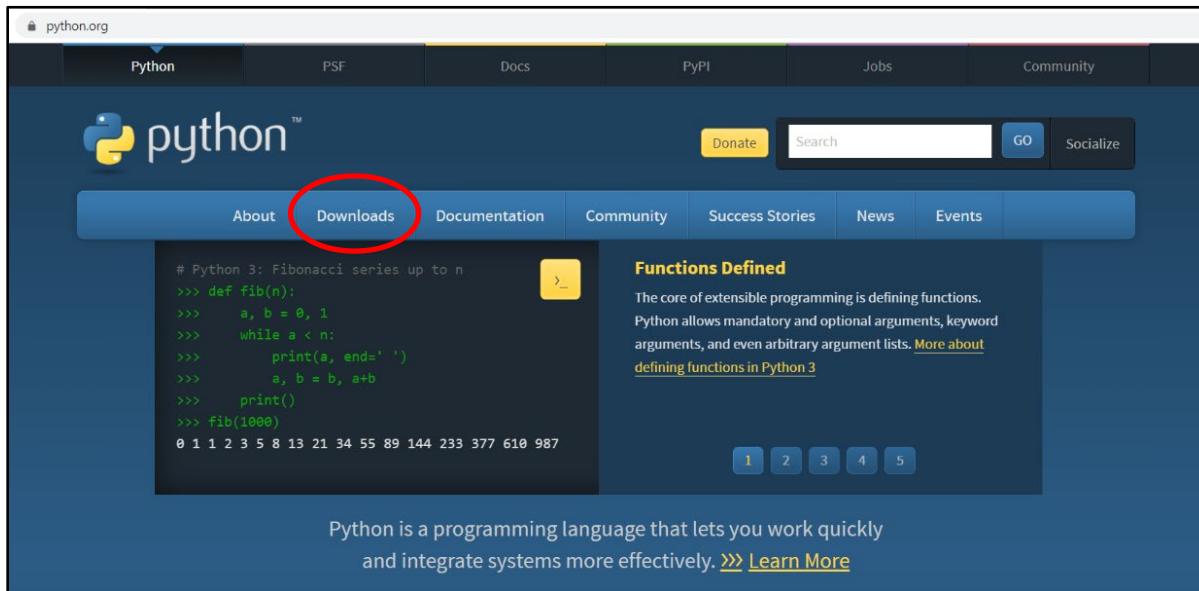
Pseudocode and Flowchart

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.

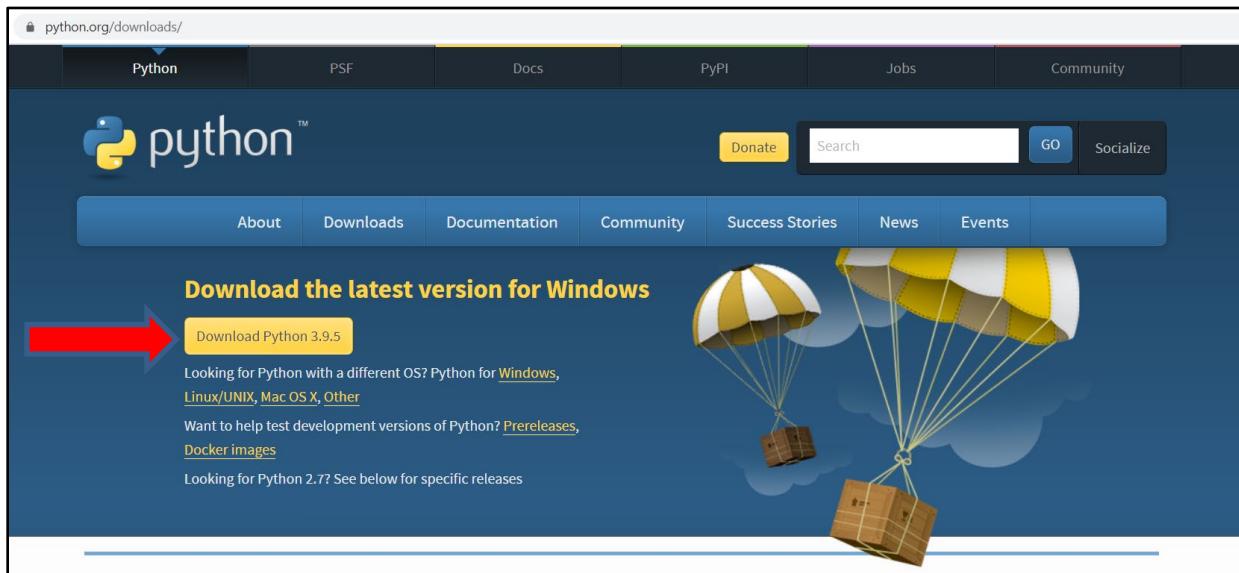


Python

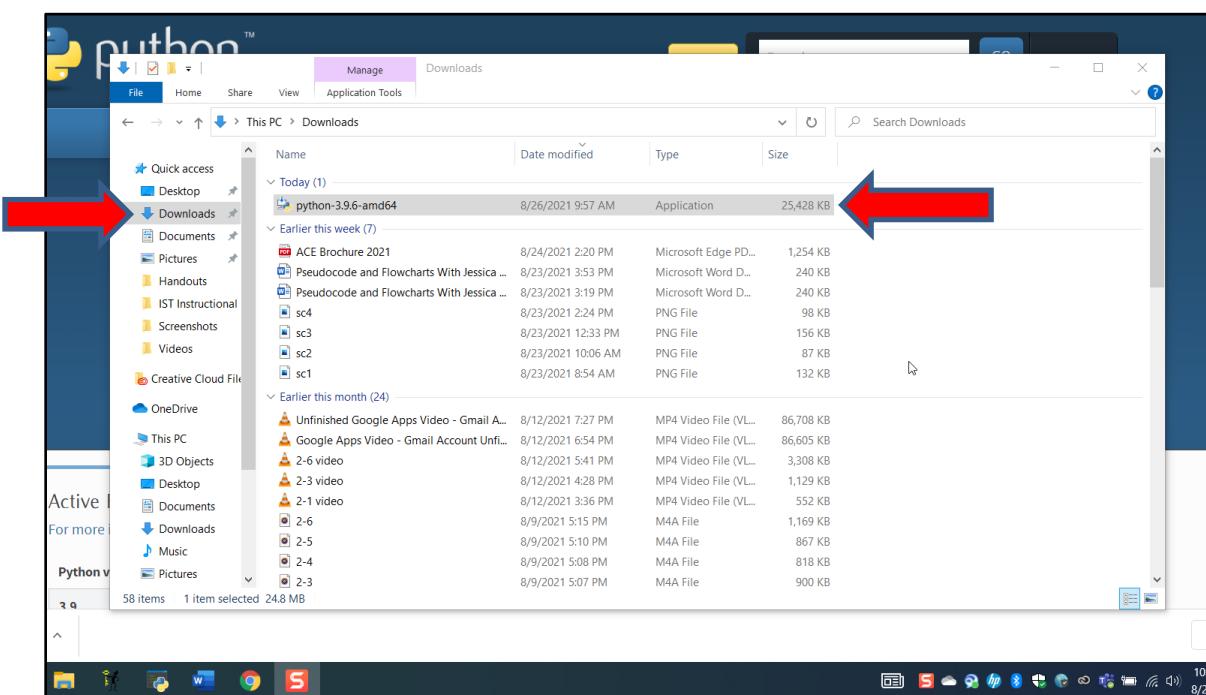
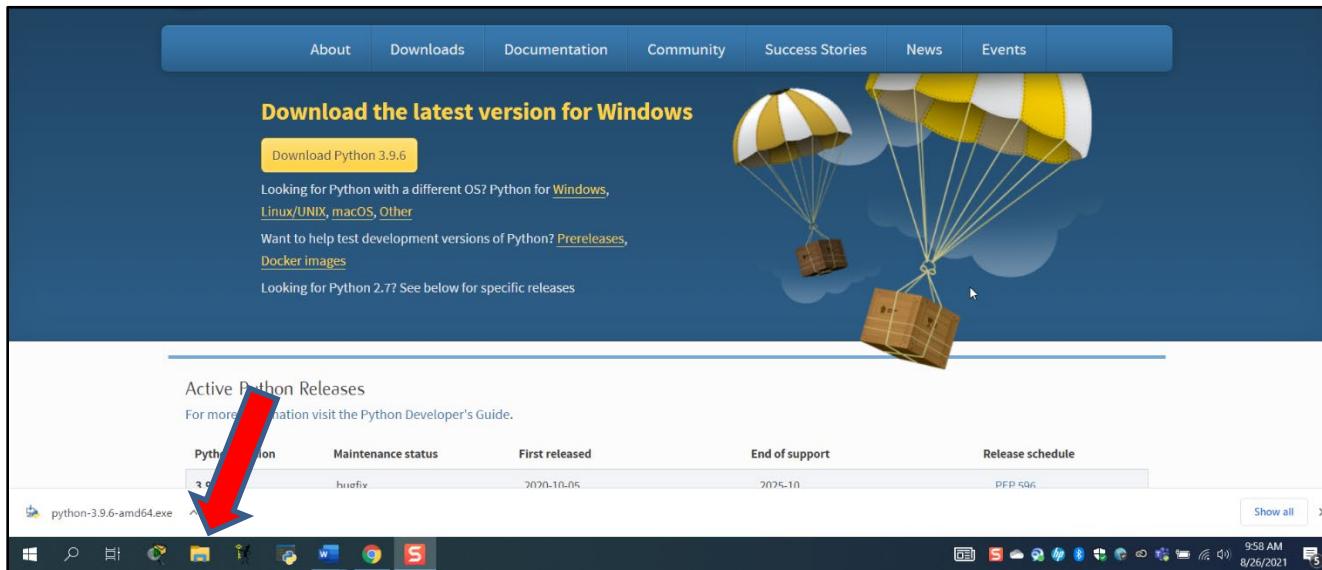
After developing the pseudocode and flowchart, the Python code can be developed. In ITP 100, the integrated development environment (IDE) that is used is IDLE. In order to use IDLE, Python has to be downloaded, which will include IDLE in the package. There are three steps that need to be followed in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



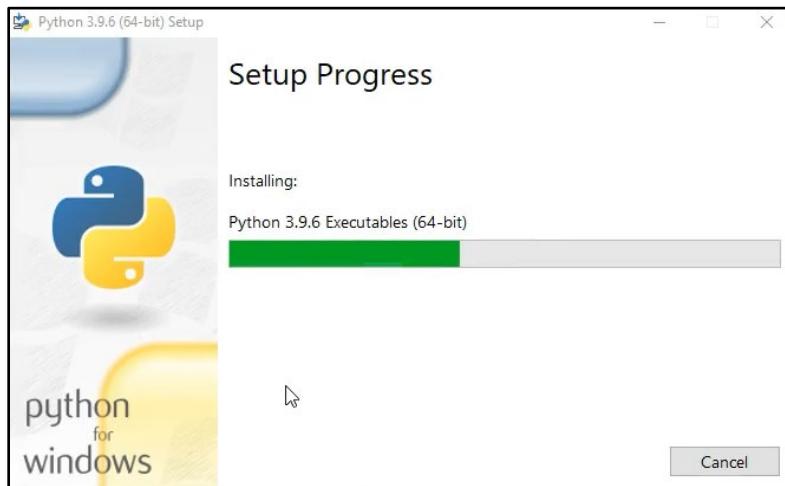
Finally, click the yellow “Download Python” button. The numbers after the word “Python” indicate the current version of the language.



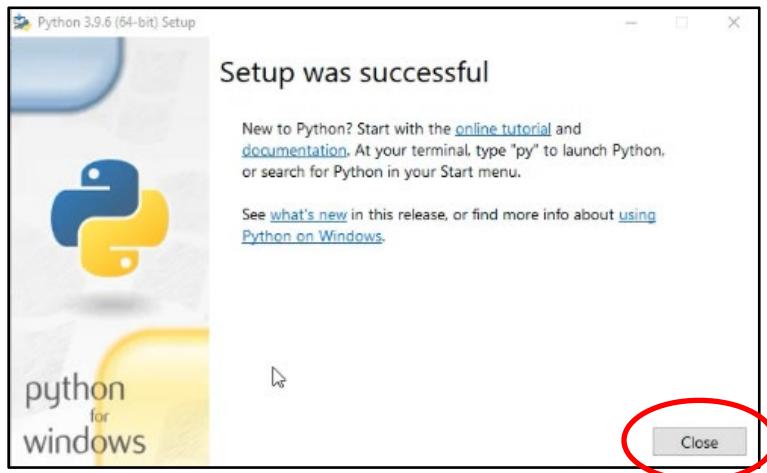
When the download is complete, Python can be installed. To do this, click the computer’s “File Explorer” icon and navigate to the “Downloads” folder. Then, double click the file that was downloaded.



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.

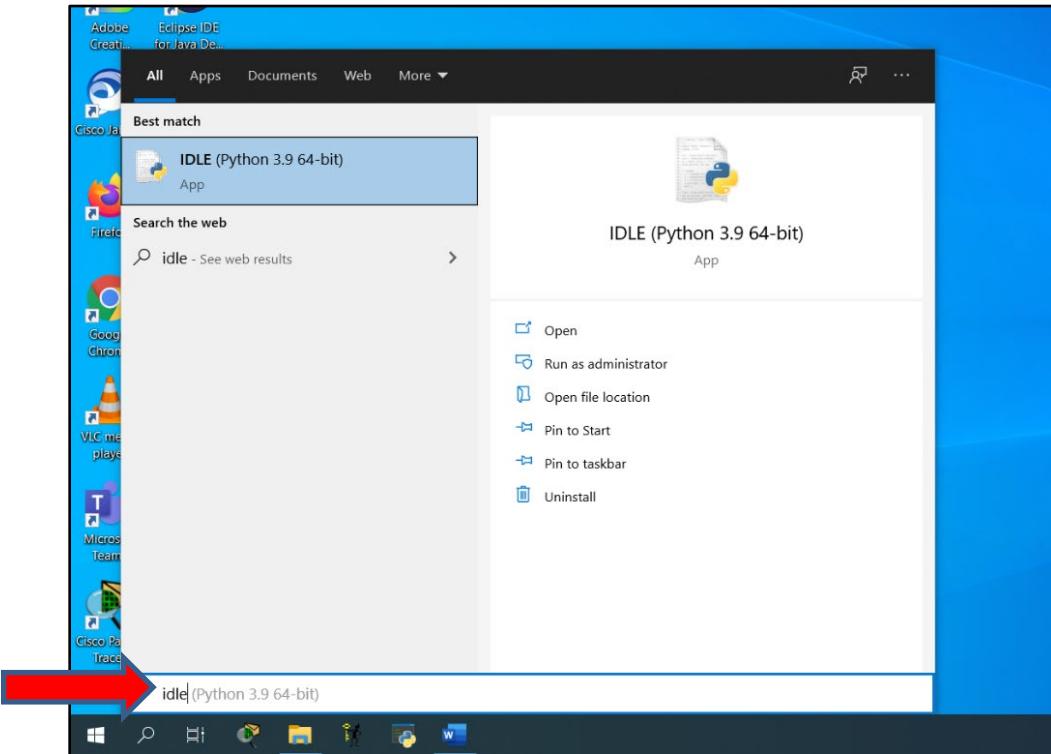


The setup will take time to complete. When it finishes, close the window by clicking the button that is labeled "Close."

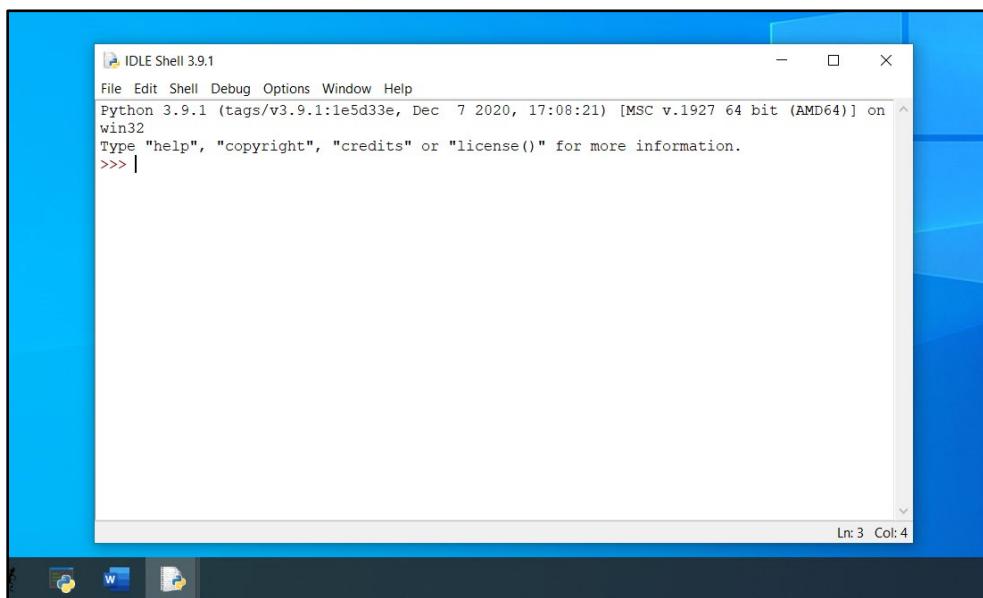


IDLE

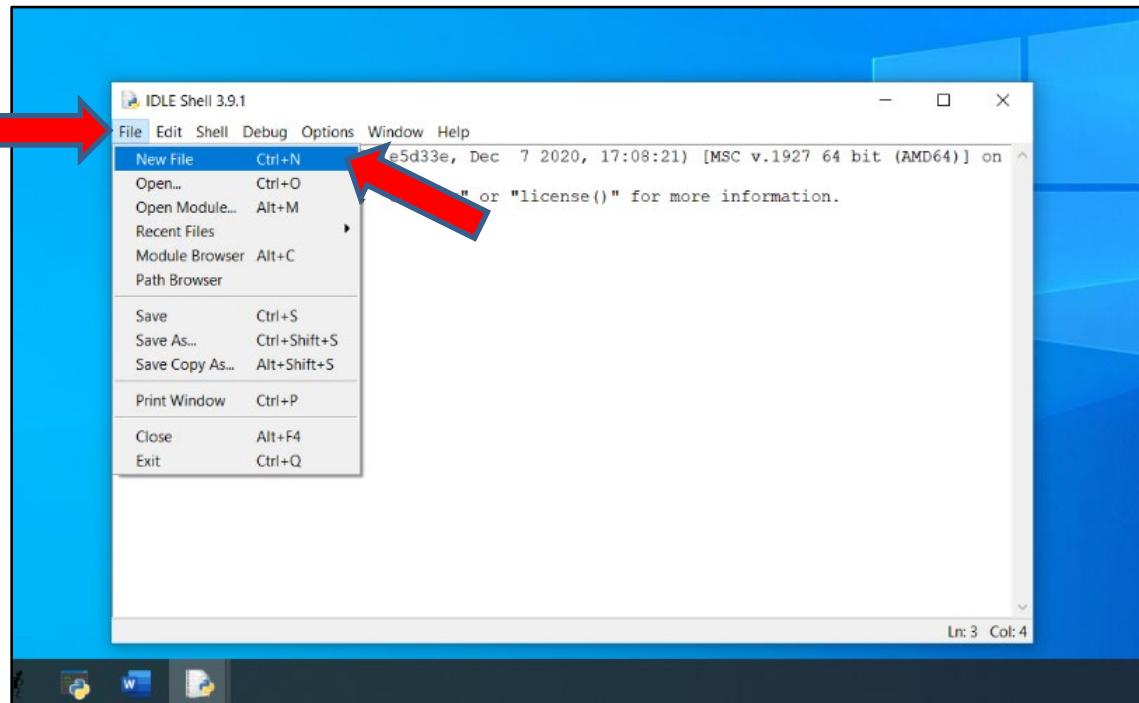
When the download and installation are complete, open IDLE. To do this, move the cursor to the computer's search feature, type the word, IDLE, and select the first option that is given.



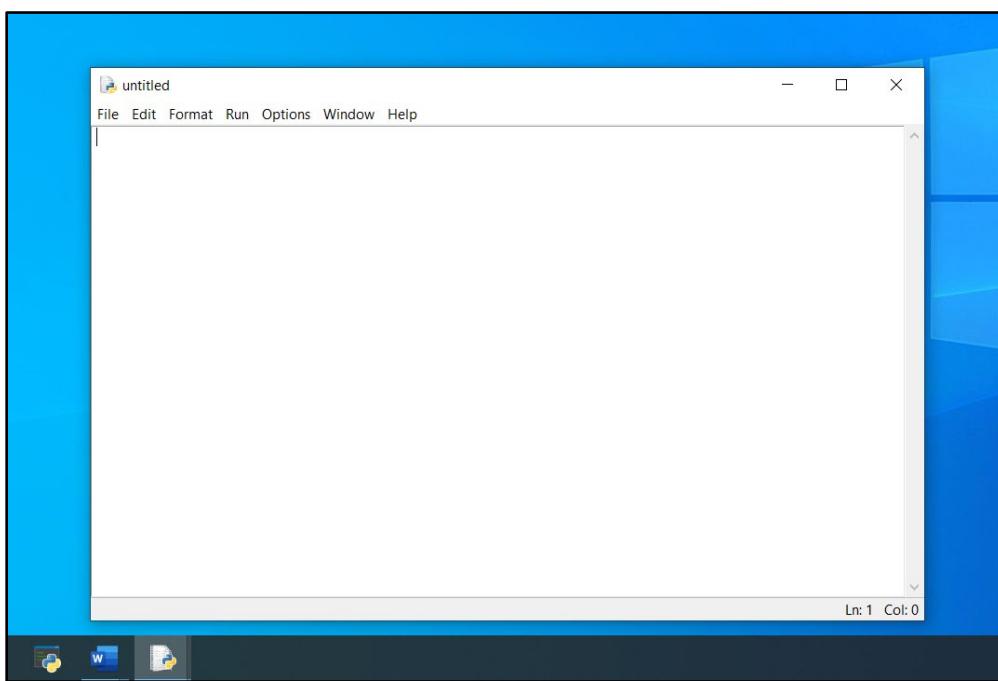
After opening IDLE, the window that will appear is called the Python shell.



Rather than writing the Python code in the shell, click on “File,” move the cursor down, and then click on “New File.”

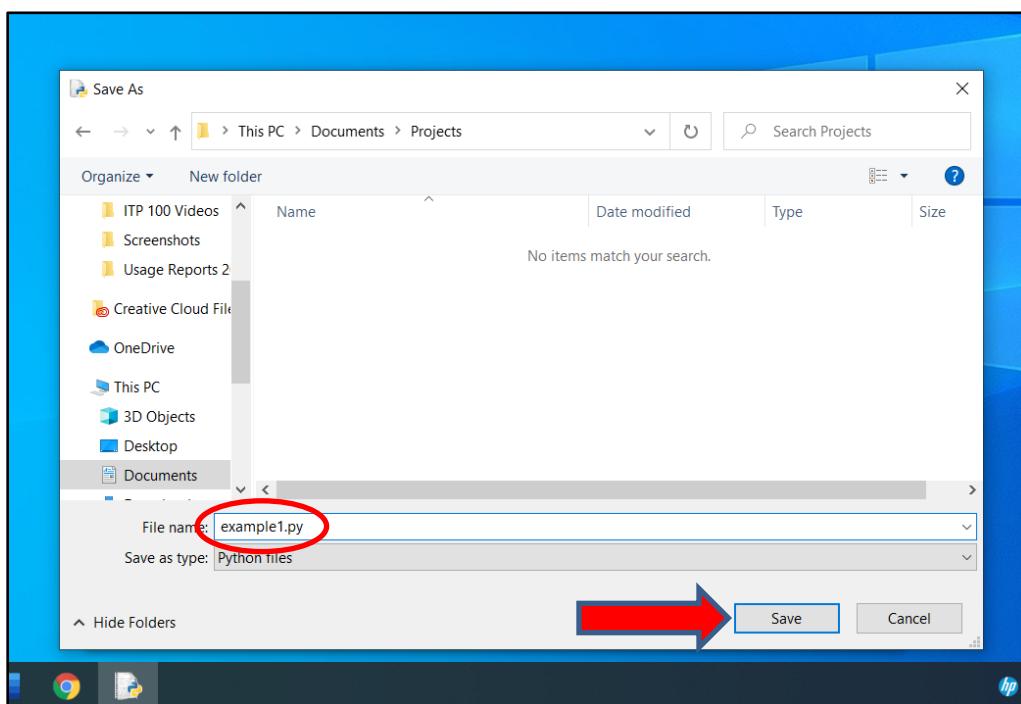
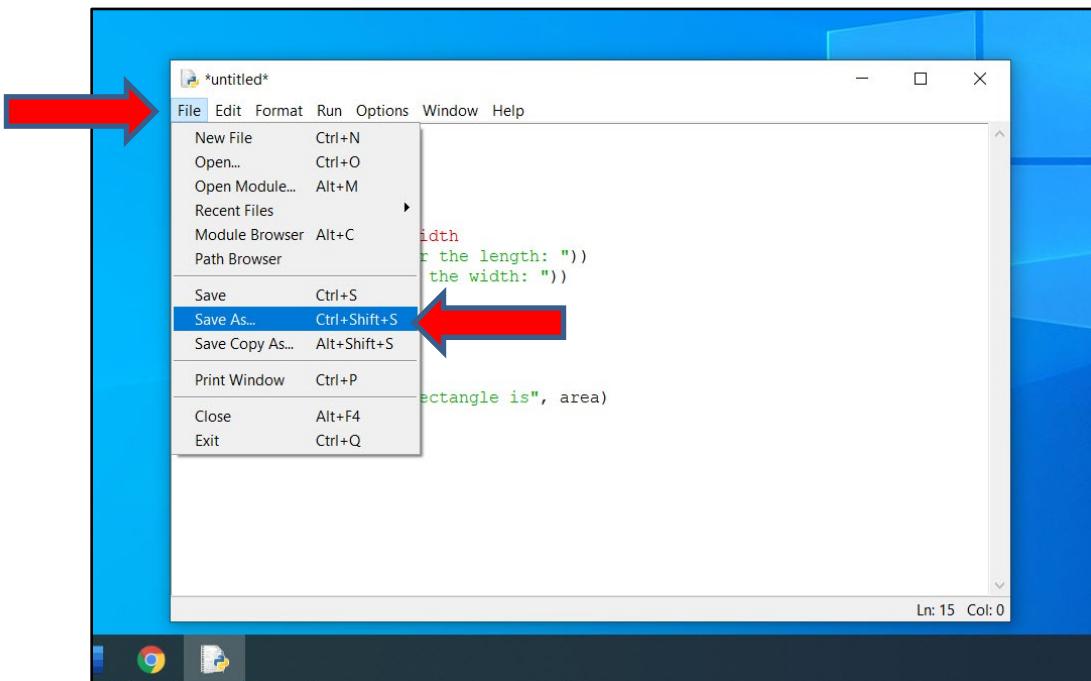


The blank page that appears is where the Python code should be written.



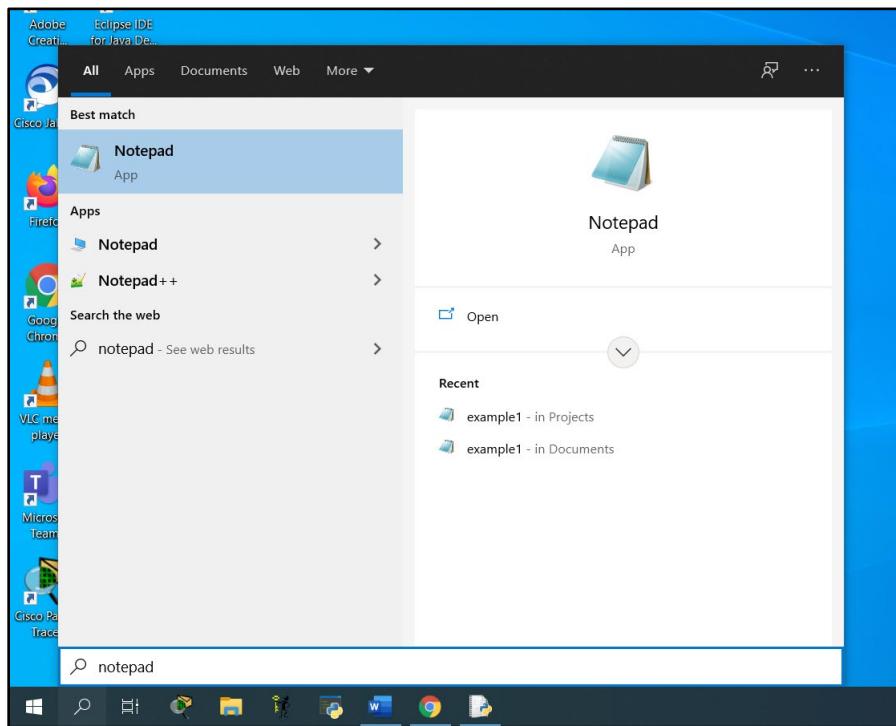
Saving the Python File

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.



```
# Student Name
# Class & Section
# Assignment Name
# Due Date

# Ask for the length & width
length = int(input("Enter the length: "))
width = int(input("Enter the width: "))

#Calculate the area
area = length * width

# Display the area
print("The area of the rectangle is", area)
```

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.

The screenshot shows the assignment details for "Chapter 1 Project". The assignment is due on June 15 by 11:59pm and is worth 35 points. It requires submitting a text entry box or a file upload. The description asks to write and test a program that computes the area of a circle. The rubric table includes criteria like "Program works as specified" (15 points), "Program commented appropriately/header" (5 points), and "Variable names are meaningful" (5 points). The total possible points are 35.

Criteria for Grade Ch. 1 Project:	Points Possible
Program works as specified	15
Program commented appropriately/header	5
Variable names are meaningful	5

The screenshot shows the file upload interface. It features a large central area for file selection with a red circle around the "Upload File" button. Below this are options for "Add Another File" and "Comments...". At the bottom are "Cancel" and "Submit Assignment" buttons. Navigation arrows for "Previous" and "Next" are at the very bottom.

meaningful

Pseudocode	5
Flowchart	5
.txt file AND .py file included in submission, (do not plagiarize!)	-35 to 0
Total Points Possible	35

File Upload Text Entry Google Drive Google Drive (LTI 1.3) Hoonuit More

Upload a file, or choose a file you've already uploaded.

Choose File No file chosen

+ Add Another File

Comments...

Cancel Submit Assignment

◀ Previous Next ▶

Open

This PC > Documents > Projects

Name	Date modified	Type	Size
Example Pseudocode and Flowchart	5/27/2021 3:39 PM	Microsoft Word Document	28
example1.py	6/3/2021 2:32 PM	Python File	1
example1.txt	5/12/2021 9:20 AM	Text Document	1

Hoonuit More

File name: Example Pseudocode and Flowchart

All Files

Open Cancel

Comments...

Cancel Submit Assignment

◀ Previous Next ▶

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.

The screenshot shows the Germanna Academic Center for Excellence LMS interface. On the left is a vertical sidebar with icons for Account, Dashboard, Courses, Calendar, Inbox, History, Studio, Help, and GCC Student Resources. The Dashboard icon is highlighted. The main area shows a table of requirements:

meaningful	
Pseudocode	5
Flowchart	5
.txt file AND .py file included in submission, (do not plagiarize!)	-35 to 0
Total Points Possible	35

Below the table is a file submission form. It includes tabs for File Upload, Text Entry, Google Drive, Google Drive (LTI 1.3), Hoonuit, and More. The File Upload tab is selected. A message says "Upload a file, or choose a file you've already uploaded." Below this is a "Choose File" button with the path "Example Pse...lowchart.docx". There is also a link "+ Add Another File" which is circled in red. A "Comments..." text input field and "Cancel" and "Submit Assignment" buttons are present. At the bottom are navigation links for "Previous" and "Next".

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@germann.edu.