InLab01

Objectives

- Run the first Python program using a Python IDE
- Learn how to submit your program

Instructions

1. File Organization

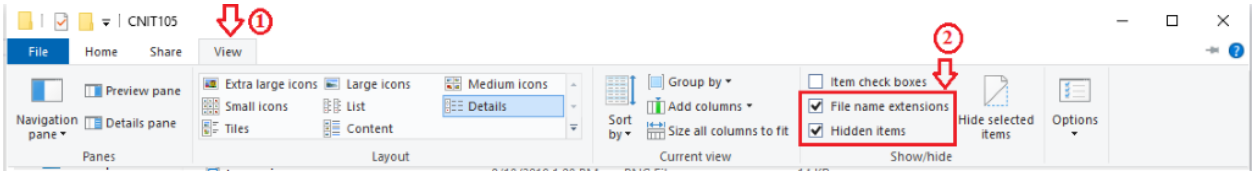
1) It is important to have an organized folder / file system to save and retrieve your programs smoothly.

a. Login to the lab computer with your Purdue career account.
b. In your Home directory **(W drive)** create a folder named **CNIT155**.
c. Use this folder to save all the course work for this class.
d. Inside CNIT155 folder, create two sub-folders; name them **Assignments** and **InLabs.**
e. Use *Assignments folder* to save your weekly programming assignments & *InLabs folder* to save the lab exercises you will complete during the lab sessions.

2) It is important to see the extension of all the files on your computer.

a. If you cannot see the extension of the files and you're using Windows 10, click on 'File Explorer' shown below

b. Click on 'View' and then choose 'Change folder and search options'.



c. If you are using an operation system other than Windows 10, such as MacOS, Linux, etc., make sure to see the extension of the files. Ex. When using MacOS, right click on the file -> Get Info -> Find Name & Extension:

2. Download Python 3.x (When using your own machine)

Install Python version 3.x prior to downloading Python IDE.

- Windows: https://www.python.org/downloads/windows/
- Mac: https://www.python.org/downloads/mac-osx/

3. Install Wing Python IDE

1) Visit https://wingware.com/downloads/wing-personal

2) Find Download -> Click Wing Personal -> Download Installer based on your machine's operation system.

4. InLab01 Instructions & Requirements

1) At the beginning of the program, include "Introductory Comments" as below. **All** your submissions should include a segment of introductory & inline comments.

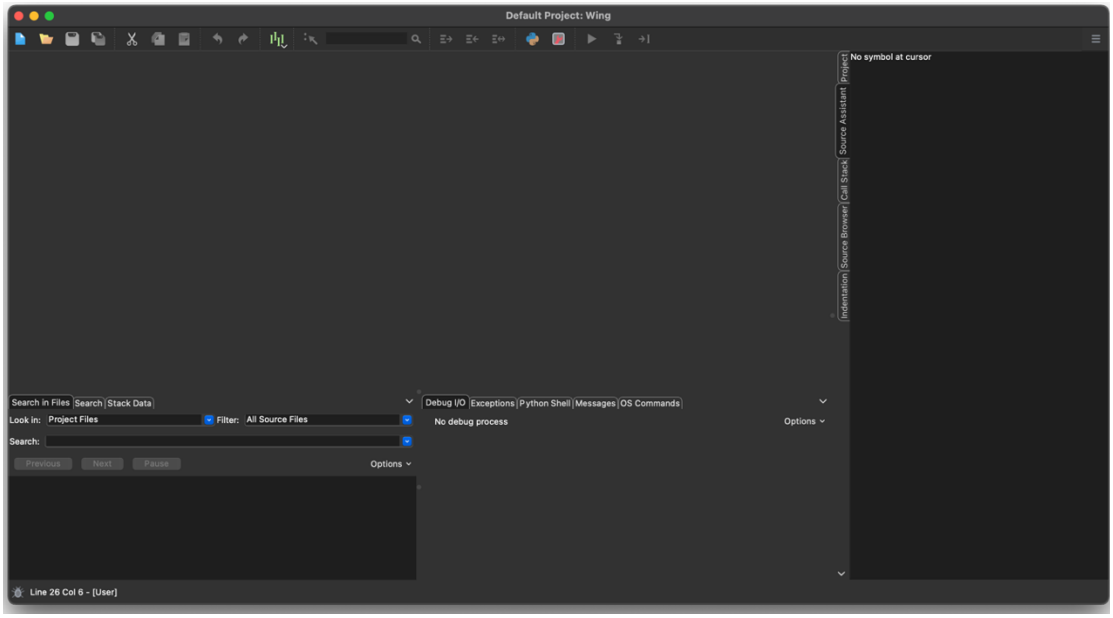
Introductory Comments:

```
#============================================================
# Your Name & Lab Section: (ex: Purdue Pete, Friday 1:30pm)
# Your Purdue Email:
# Program Description: In your own words, provide a brief description of the
program.
# Academic Honesty:
# I attest that this is my original work.
# I have not used unauthorized source code, either modified or unmodified.
# I have not given other fellow student(s) access to my program.
#============================================================
```

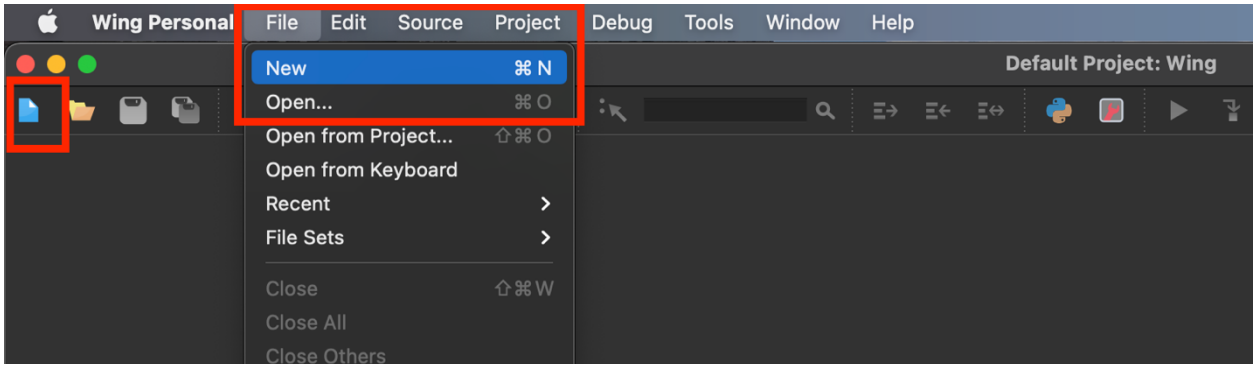
2) Add inline comments to explain logic, assumptions, details, etc. **At least 3 InLine comments are required to get the grade.**

Inline Comments: EX. `#Calculate the area of the rectangle`

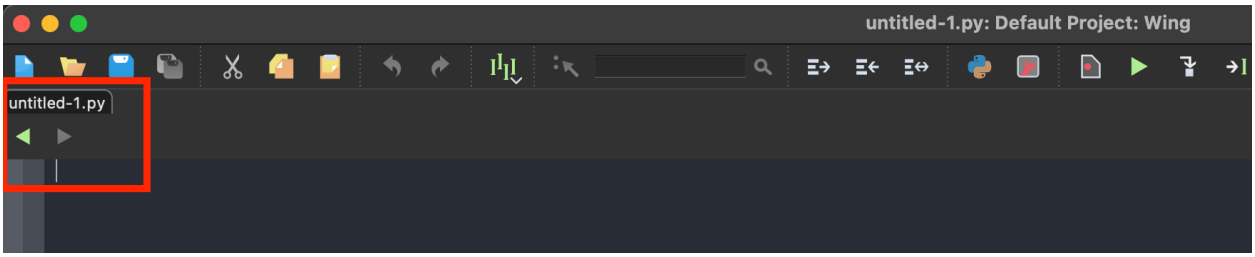
3) Once the installation is done, open Wing Personal.



4) Now create your new project. Either click *File -> New* or Click *File Icon* (see small red square on the left corner). ***Note**: For each InLab and Assignment, you should set up a new project. It is NOT a good idea re-using the same project.*



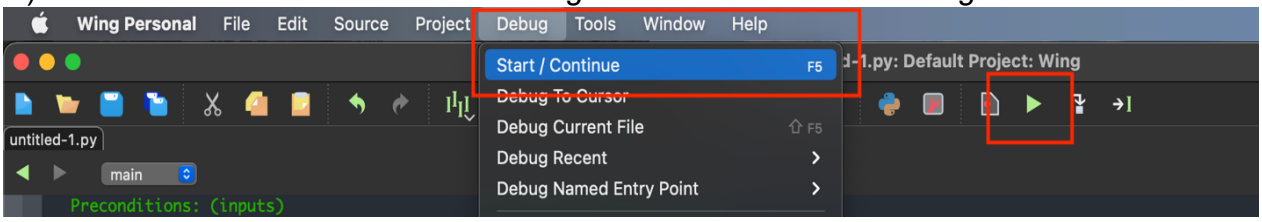
5) Once you create a new python file, you can see `untitled-1.py` has been created and a cursor is blinking where you can write a program.



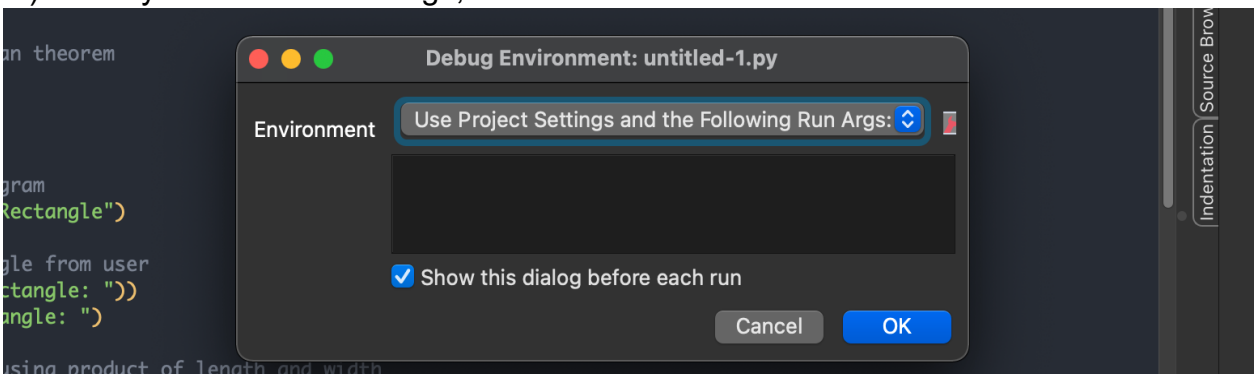
6) Now write code (as below) and include Introductory & InLine comments. As for the Introductory Comments, change the name, lab section, and Purdue email information to your own.

```
1  #=================================================================
2  # Your Name & Lab Section: Purdue Pete & Thursday 1:30p
3  # Your Purdue Email: purduePete0@purdue.edu
4  # Program Description: This is my first Python program.
5  # Academic Honesty:
6  # I attest that this is my original work.
7  # I have not used unauthorized source code, either modified or unmodified.
8  # I have not given other fellow student(s) access to my program.
9  #=================================================================
10
11
12 def main():  #define the main function
13
14     print("Hello World!")      #this main function prints Hello Worlds! & This is my first Python program! to the screen
15     print("This is my first Python program!")
16
17
18 main()  #call the main function that prints two sentences above
19
20 # end of the program
```

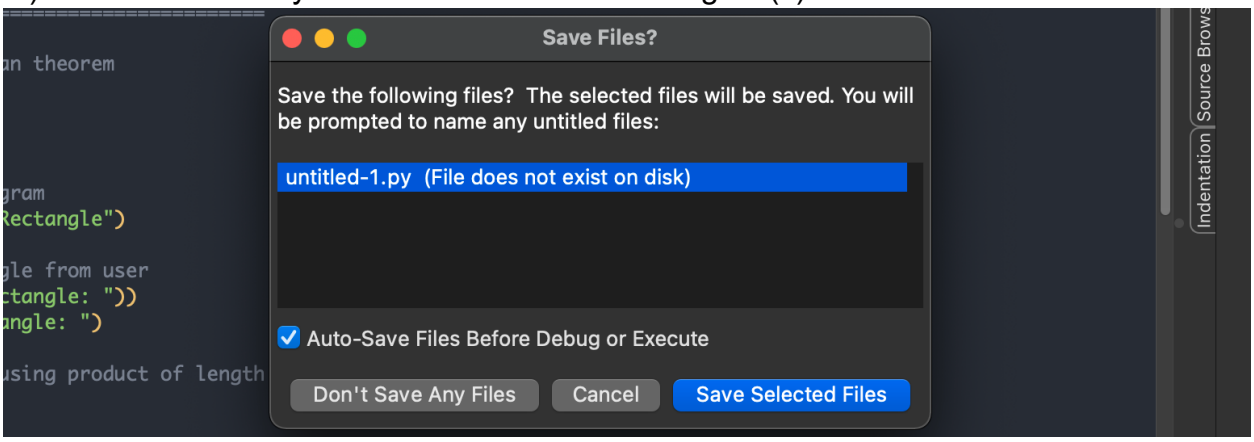
7) Now execute the code with the *Debug -> Start/Continue* or *Debug button* as below.



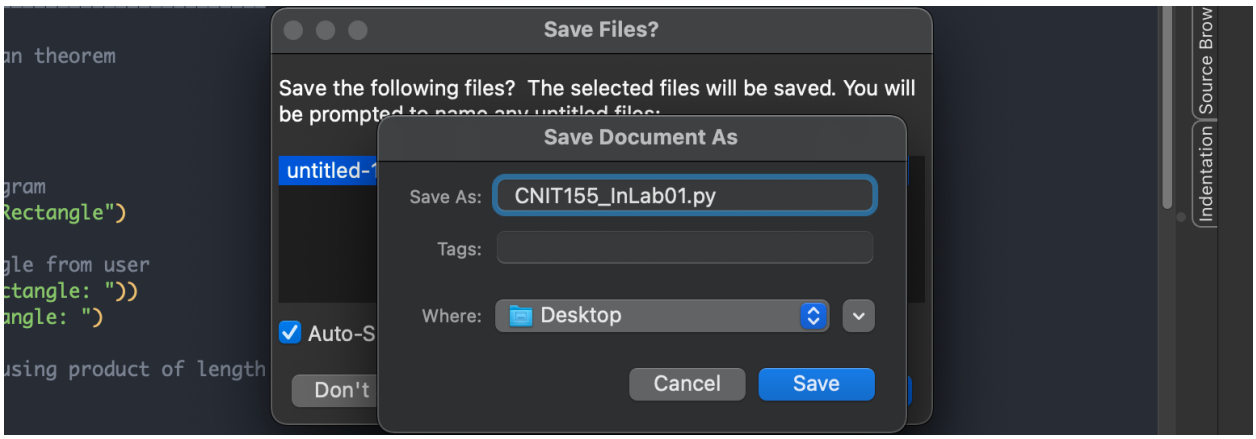
8) When you see the followings, click “OK”.



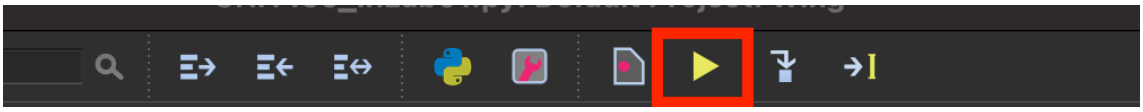
9) Then it will ask if you want to save the following file(s). Click “Save Selected Files”



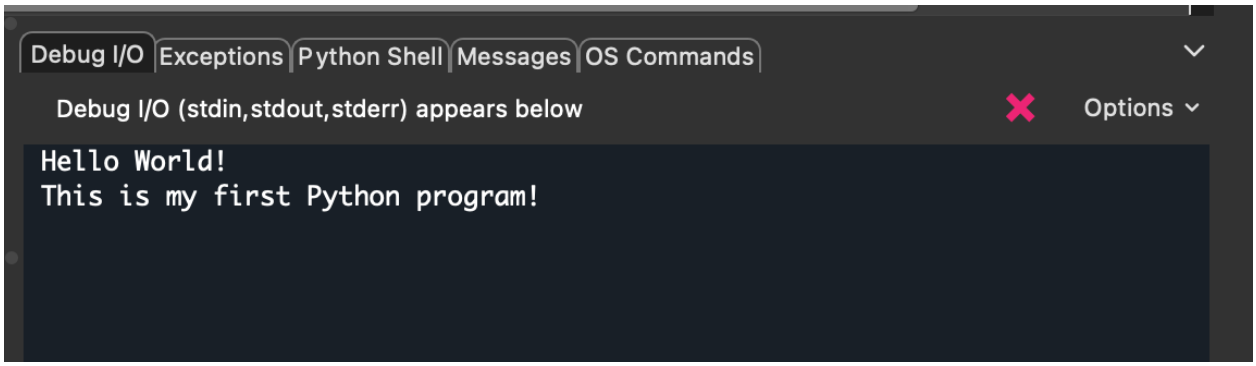
10) Save the file as “`CNIT155_InLab01.py`” and click “Save”



11) After saving the file, click the debug button again to run your code.



12) Now your program prints the output to the screen as below! You are all set!



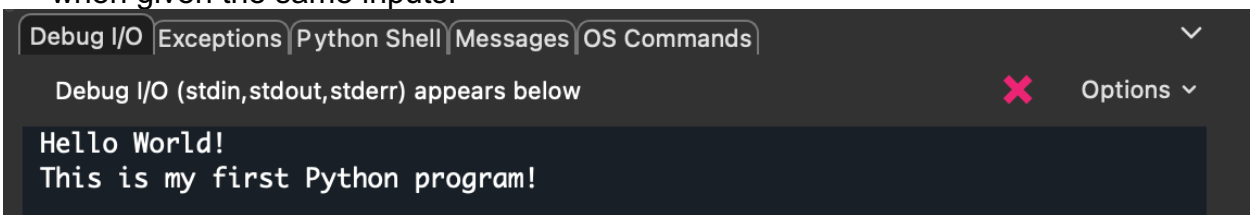
13) Have your TA check off your InLab01. Once it is approved, submit your program (the source code `.py` file) on Brightspace.

Submission

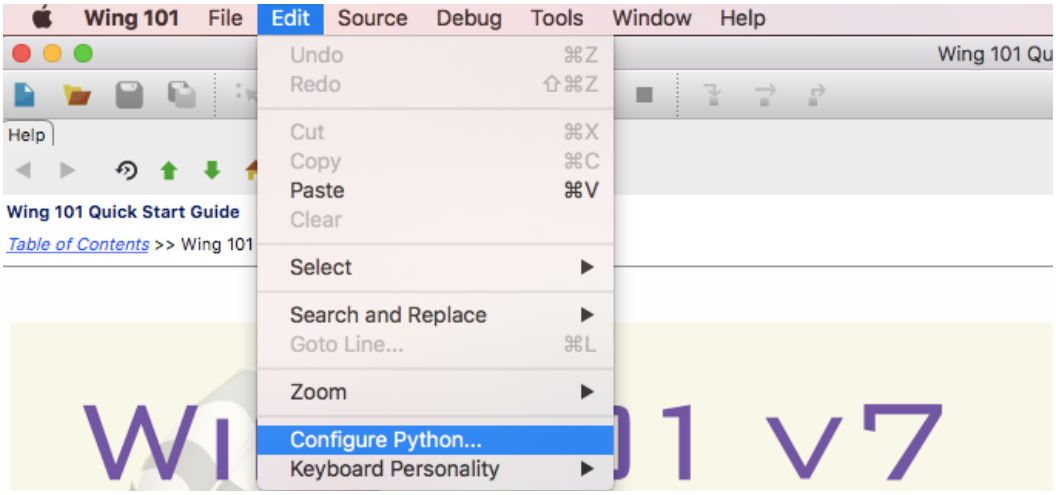
- **Submit the `.py` file on Brightspace.**
- BEFORE submission, test your program by comparing your program's output with **Desired Outputs**.
- AFTER submission, download your submission and test whether your program runs without any issue.
- NO late submission will be accepted.
- There will be penalties for wrong file submission and any errors in the program.
- Only the last submission will be graded, although you can turn in as many as you want.

Desired Outputs

- Again, BEFORE submission, test your program by comparing the outputs in the example figures below. Your program MUST produce the same outputs as below when given the same inputs.

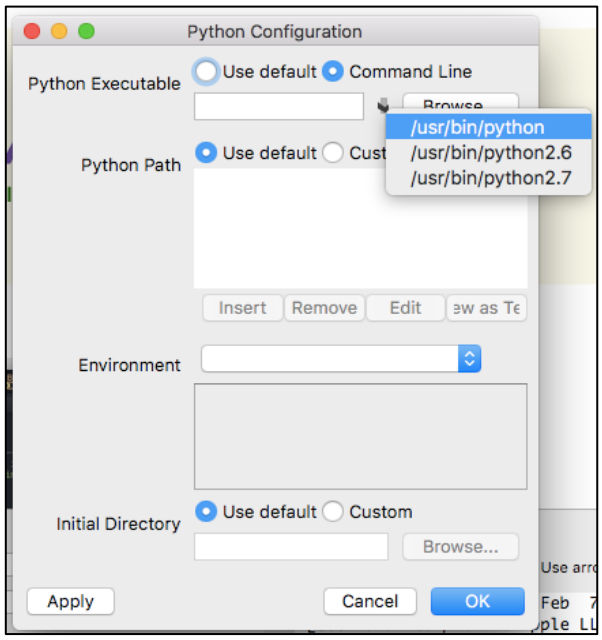


Note: Either in Mac or Windows, ***if*** *any Python installation error pops up when using WingIDE*, go to *Edit ->Configure Python*.



And choose your python executable:

> On Mac :



> On Windows :