Software Development 1

Getting started with Python

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Once Python and PyCharm are installed:

What next? *(This example is for windows)*

- You now have two options to run python:

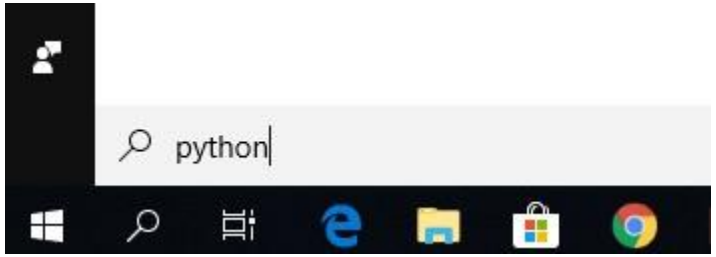
1. Using the Python command line
2. Using PyCharm

Let’s look at both……..

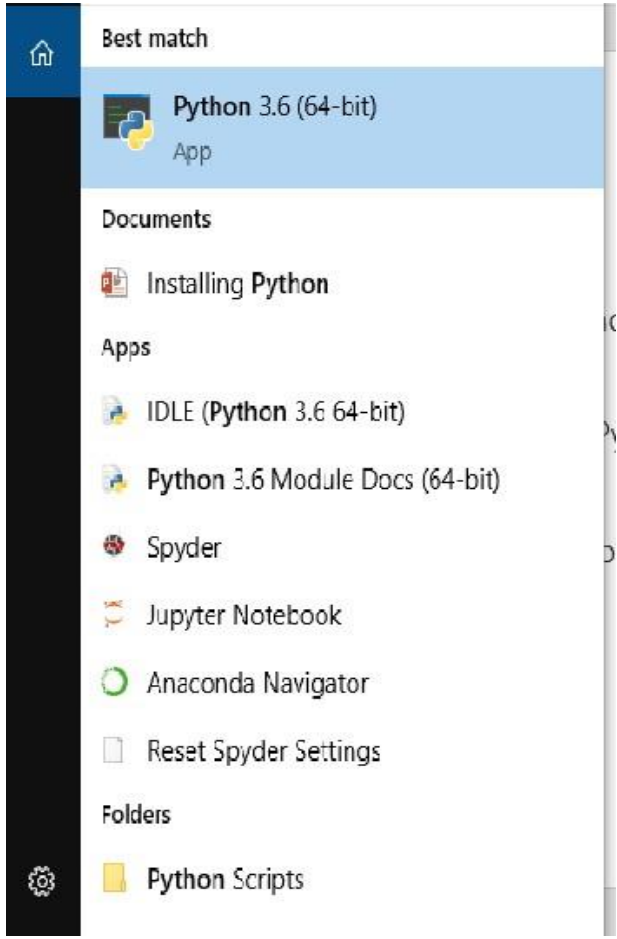
Python Command Line:

Open the python command line:

A) Search for Python



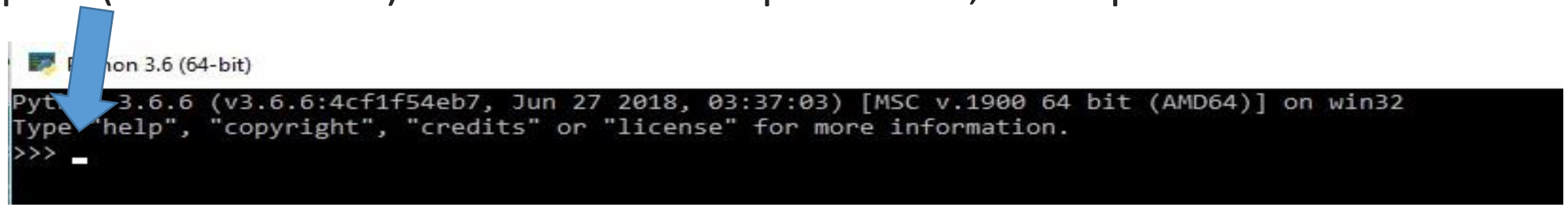
B) Select Python desktop app



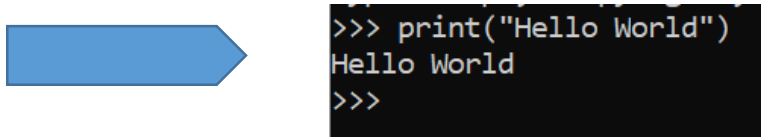
Python Command Line:

Let’s run your first program:

Type : print(“hello world”) where the >>> is presented, then press enter.



The result is then displayed



PyCharm:

PyCharm is a little different.

- We were running statements directly, but let's say we wanted to create a program that was 1000 lines long, it would be far more difficult.

  An **IDE**, Integrated Development Environment, is like a text editor, a little like MS Word. It allows us to create and edit a program before we run it.

- Also allows us to save the program, so we can re-use it.

PyCharm:

Launch PyCharm.

- The first time we run it we need to select the Interpreter.

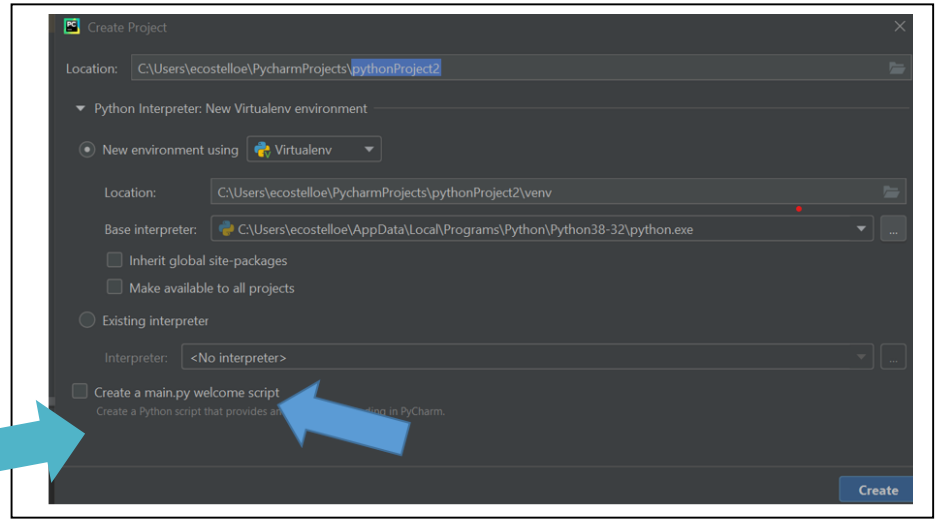
- “An Interpreter is a computer program that directly executes, i.e. performs, instructions written in a programming or programing language, without previously compiling them into a machine language program.”

PyCharm:

Search for PyCharm

Launch PyCharm.

Select Create New Project.



A. Name the project (Note a project can have many Python files, and select a location)

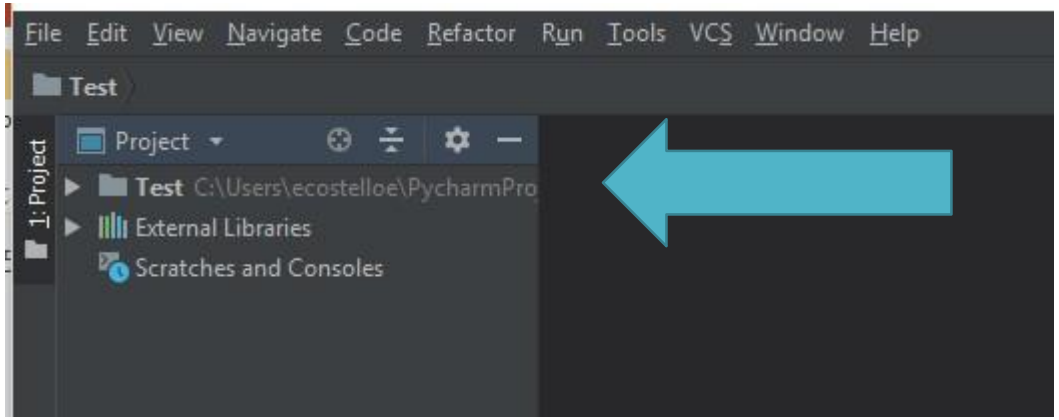
B. Select the Interpreter, a default will appear, **make sure** the “Create a main.py welcome script” is **not** ticked

C. Select Create

PyCharm:

A. The project has no Python files to run.

(To run, PyCharm needs at least one Python file to run first {As the Main})

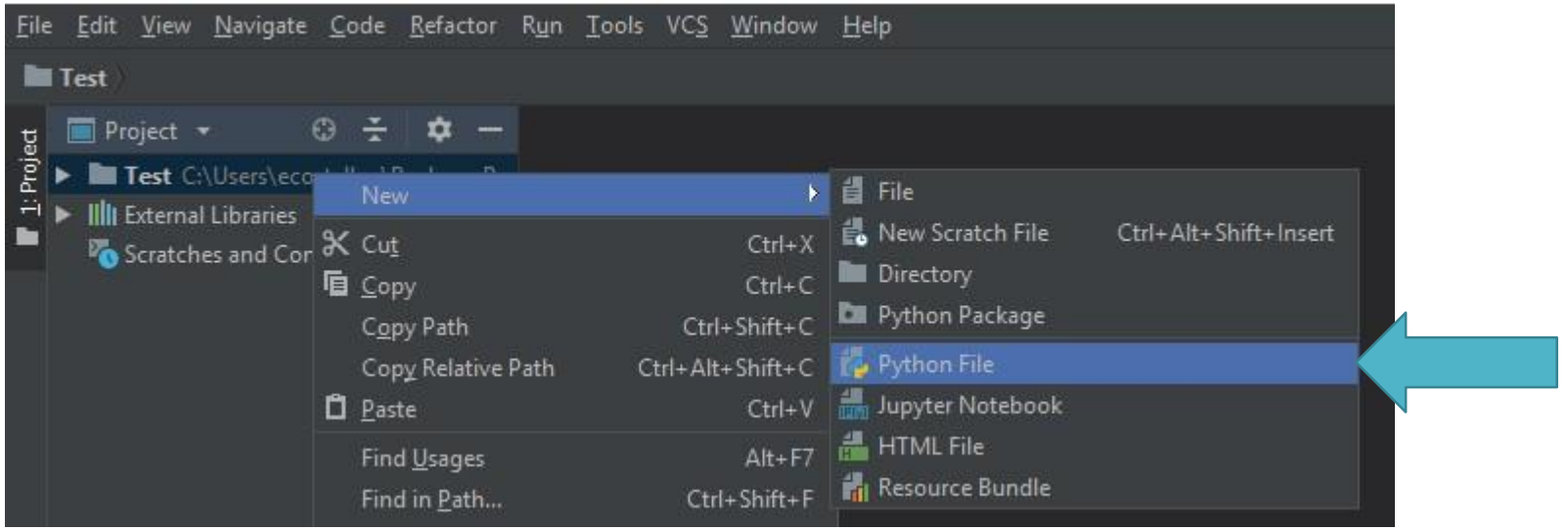


PyCharm:

A. Right click on the project folder and select

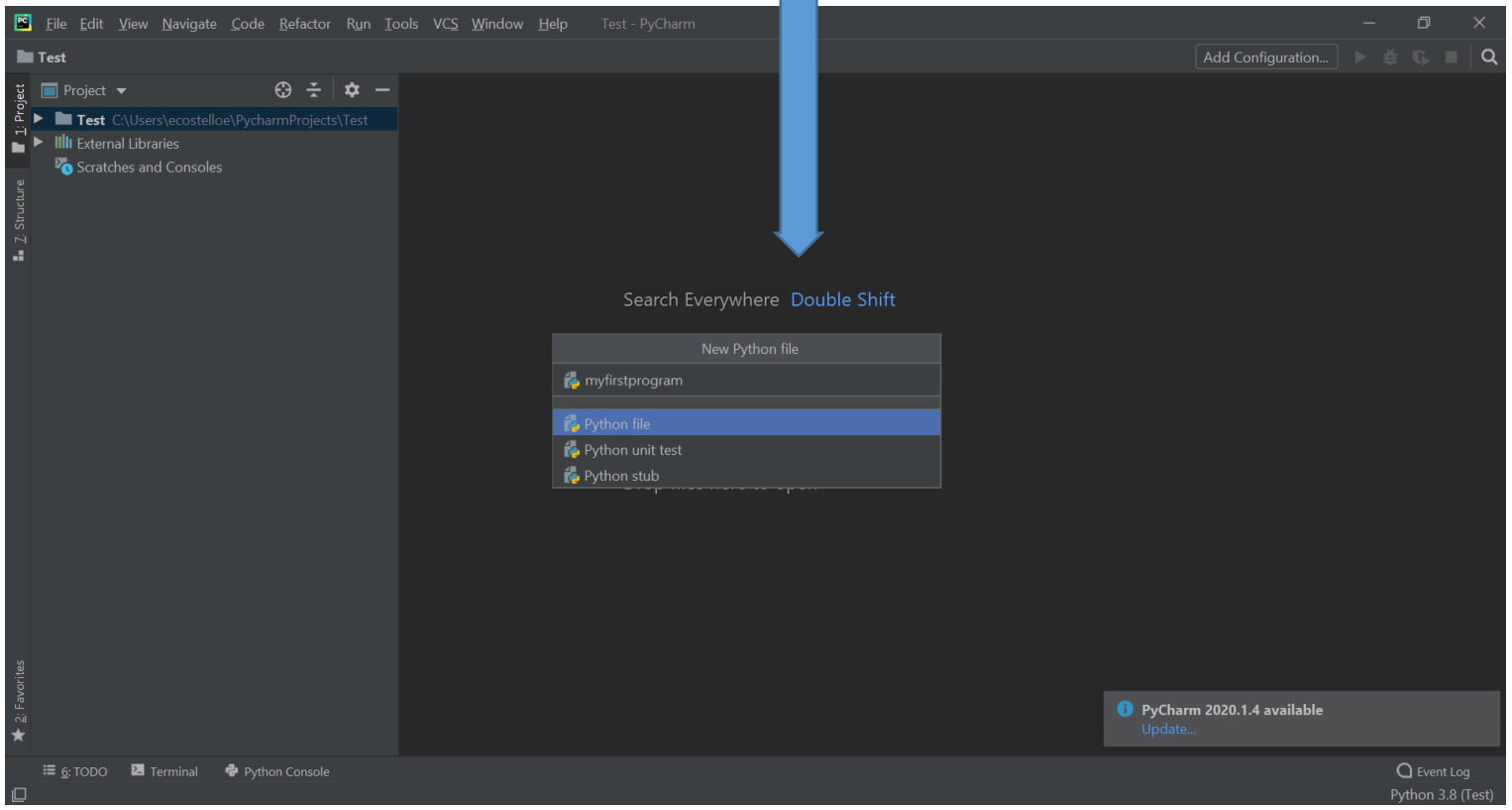
   New

   Python file.



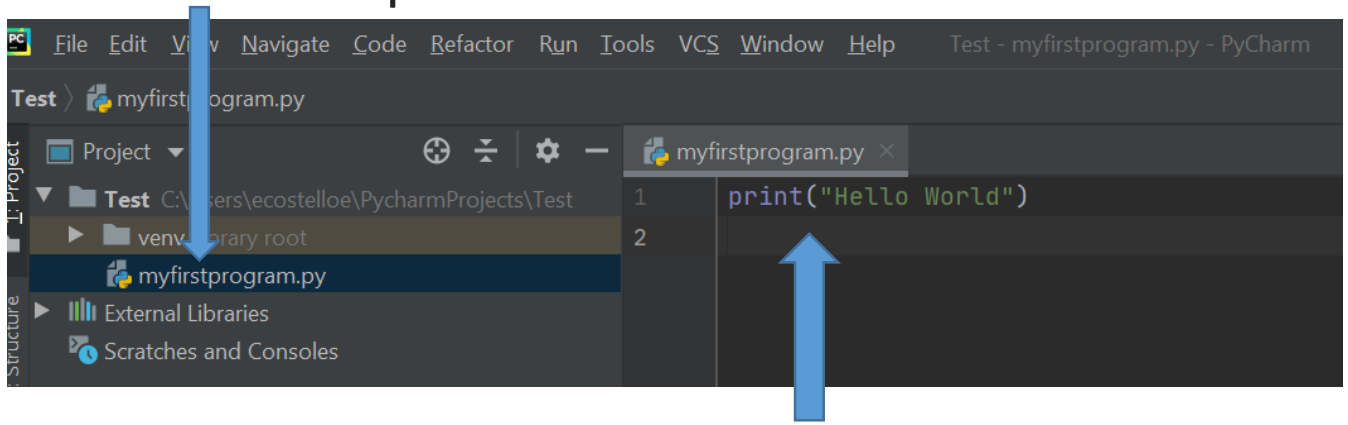
PyCharm:

Name your first Python file - Use all lowercase letters and no spaces or special characters



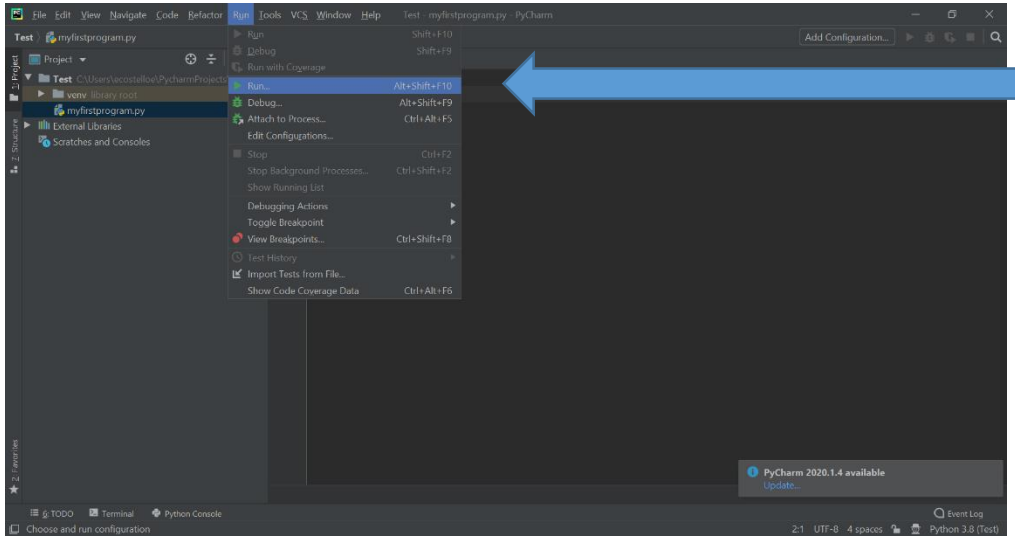
PyCharm:

A.Make sure your file is selected and open



B. Type the print(“Hello World”) statement in the edit window

PyCharm:

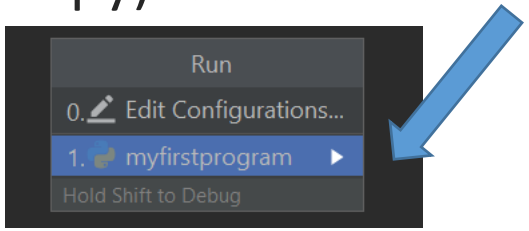


A. Select Run and Run.

We only have to do this one time for each project,

PyCharm:

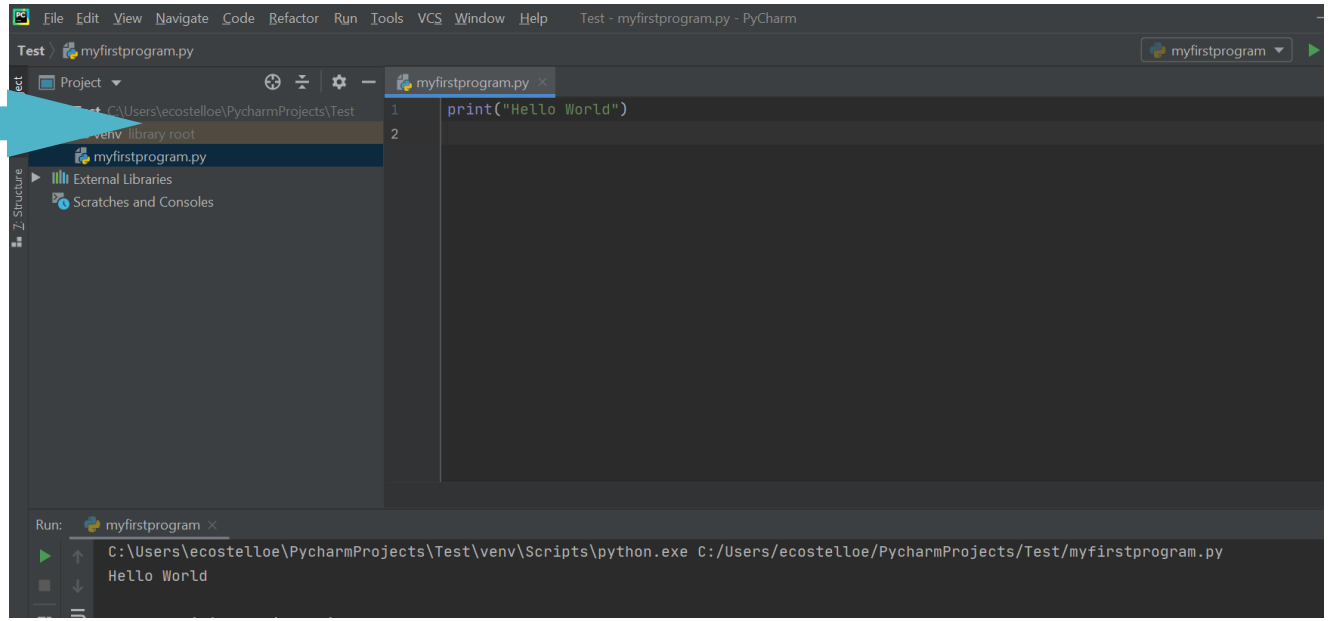
There could possibly be a list of Python files here (we only have one our myfirstprogram.py). Select the main file to run, and run.



PyCharm:

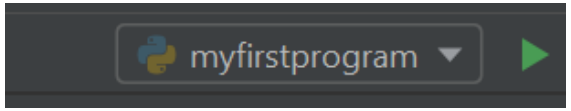
A) Our main program

B) The output from the Interpreter.

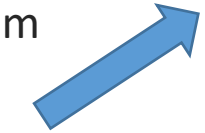


Note:

A) The top right of our IDE is now unshaded (i.e. live)

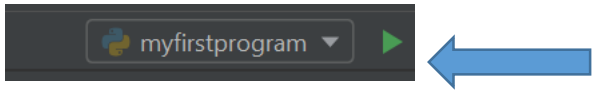


B) If you don't see this, select the View menu, from that select the Appearance menu and tick the Navigation Bar to see this.



C) The IDE now knows the main Python program.

D) You can just press this **play** button from now on to run your program.



Or : CTRL + F5

PyCharm:

Now you are ready to code…..