Python Programming

Lesson 1

Introduction to Python

Presented by Advaspire Team

Get started

https://www.python.org/downloads/

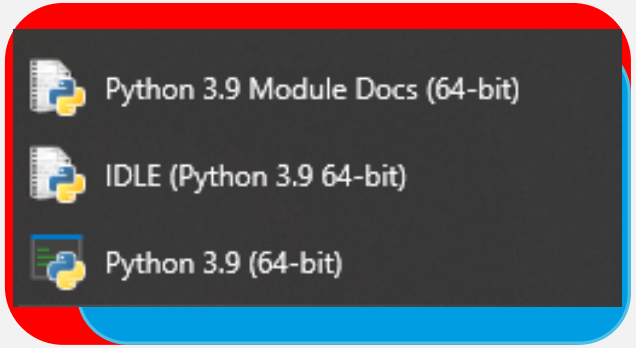
Make sure to download the stable version.

Installing Python

On the install interface, make sure click on the 2 boxes to make it easier after this.
Then just click (install now) and wait for it to finish.

What's installed

After installed, you will have this 3 software. All three will not be required to be used but we still need them to install the python3.
We are going to use another integrated development environment (**IDE**) which is software to code which have much more feature than the one here.

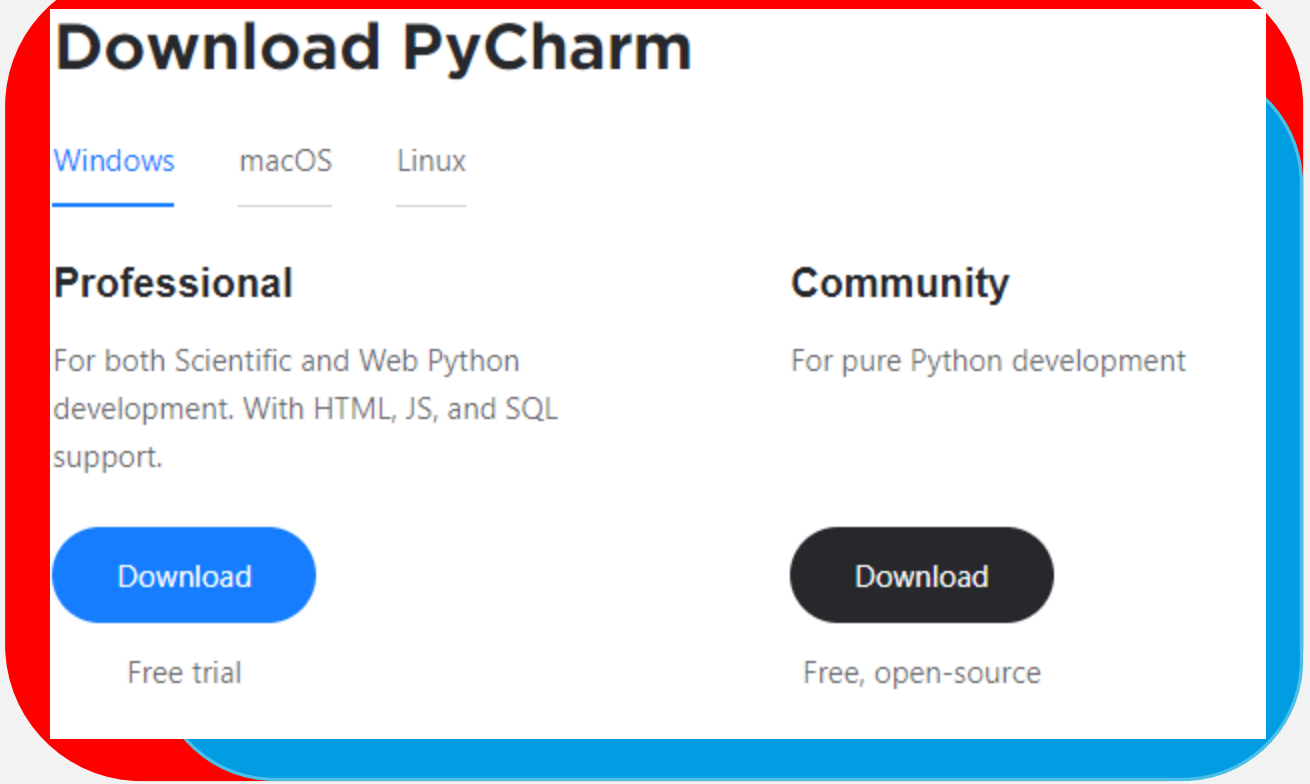


Pycharm

Pycharm is the IDE we will use. So we will program most of our game or do our lesson in this IDE. To start, you need to download the software from its website. Link is down below or you can just search for pycharm download.

On the download page, choose the community version. If you want an advance version, you can choose the Pro but that one is a paid version.

Pycharm Download



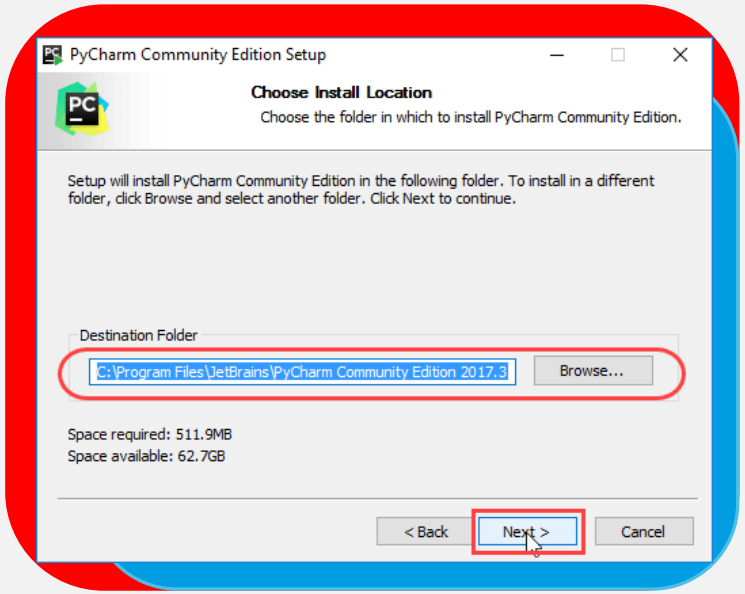
Installing Pycharm (IDE)

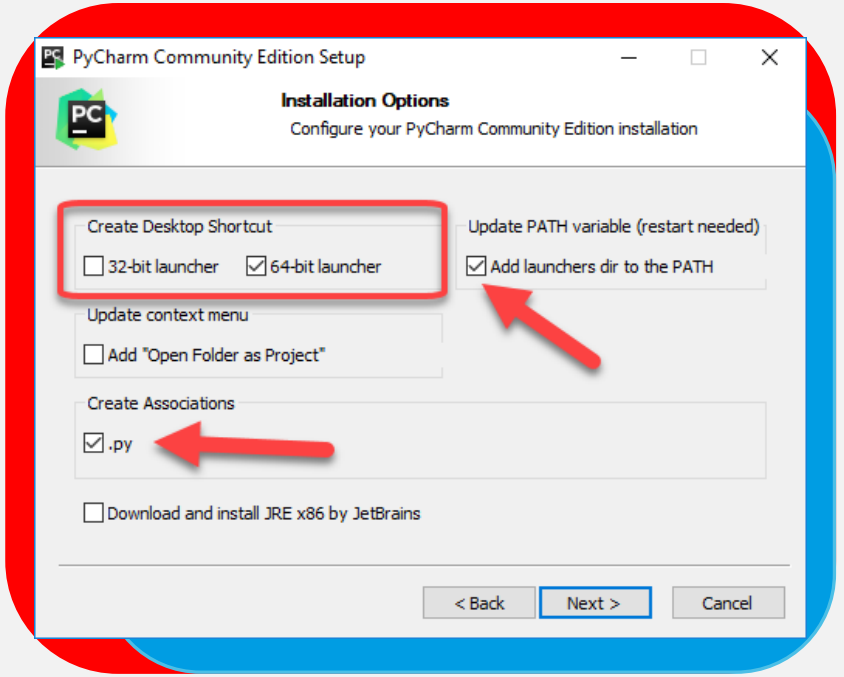
Open the Installer, then on the 1st window, choose where you want to install it. If you don't know, can just use the default.

Then once the 2nd example appear, tick on the PATH and shortcut. The 32 or 64-bit launcher actually depends on your pc system.

To check, go to your Setting> System> About. Look for System Type, that is your bit.

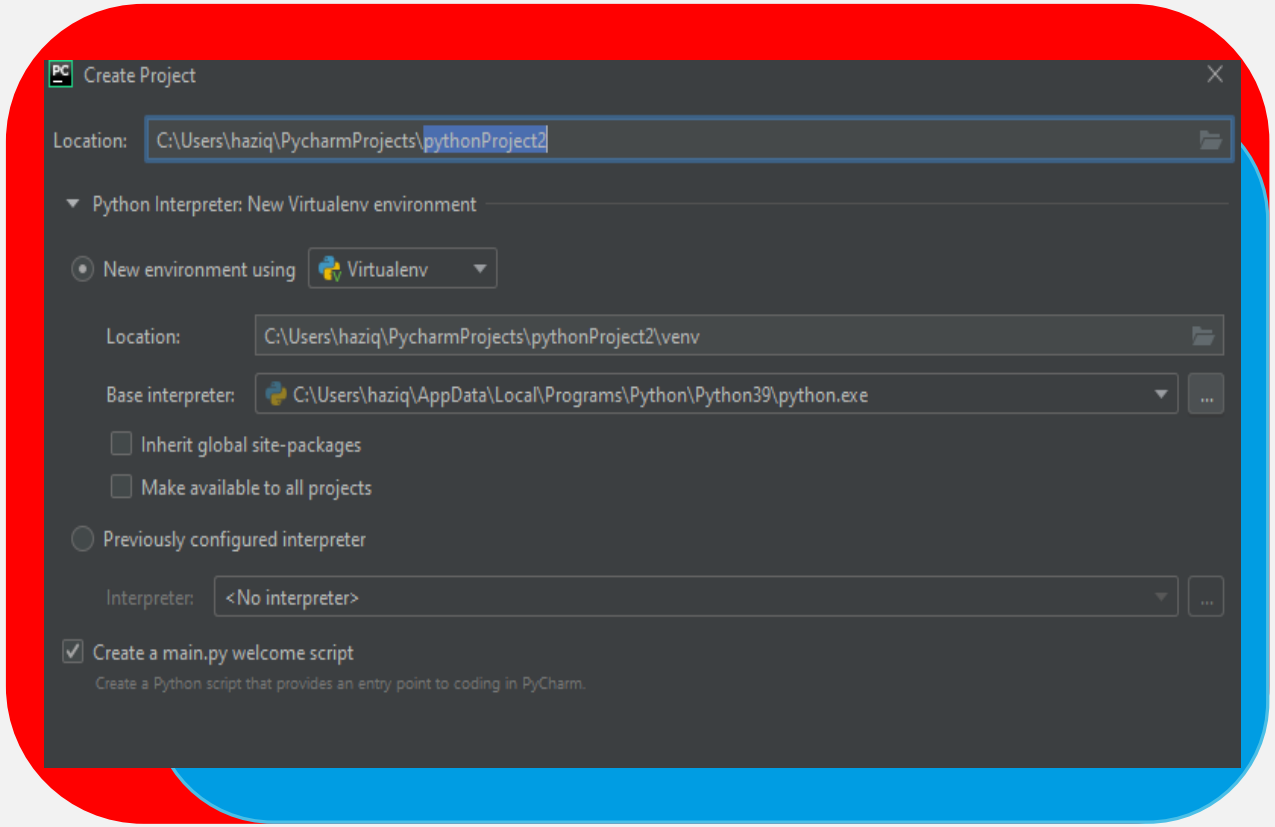
The restart can be done after we finish the lesson.



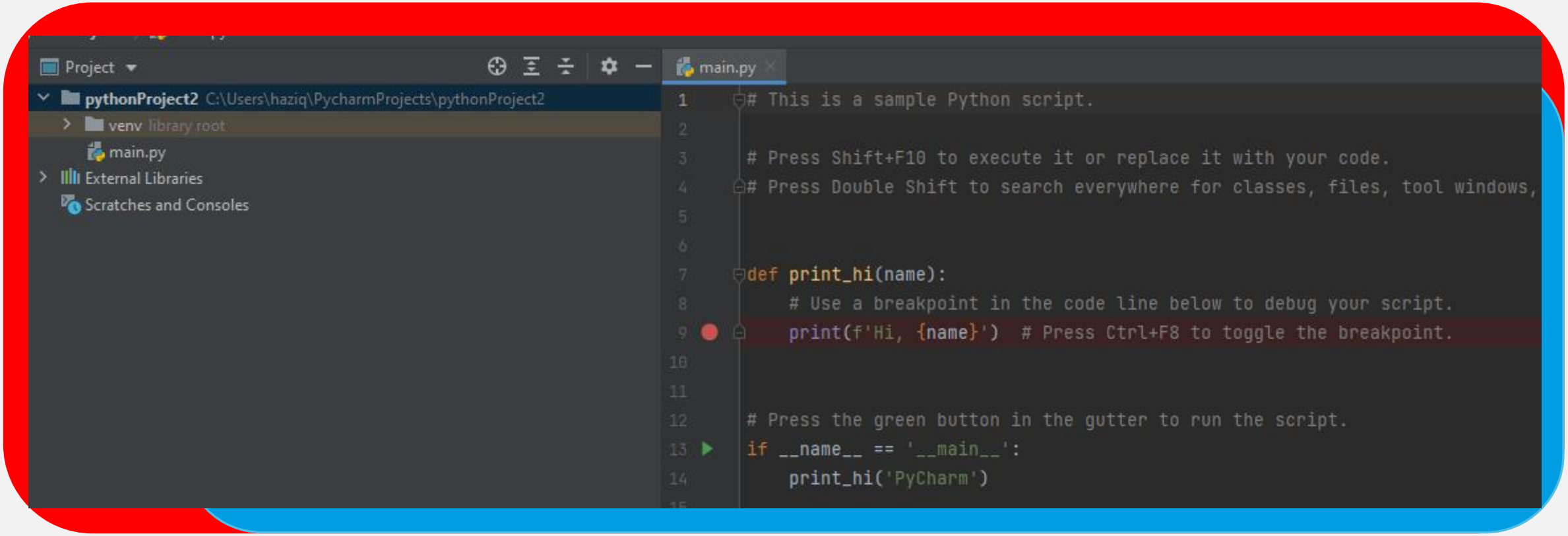


Starting Pycharm

Project will be the base for our program. It will be saved as a folder on your computer.
You can choose another location to save your project, recommended to change it to somewhere easy for you to find. Other setting can leave as is. It may take a while to start so no worries.

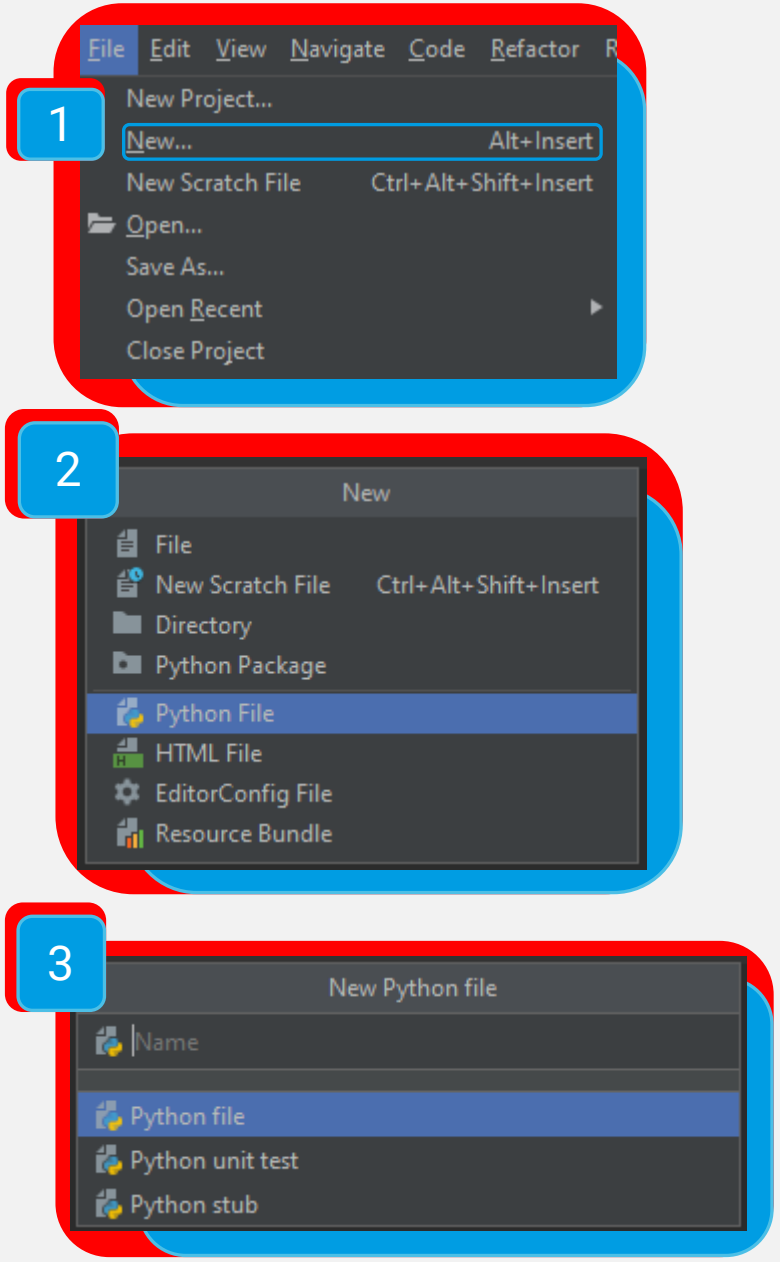


Main Interface



Add a new Tab/ New Script

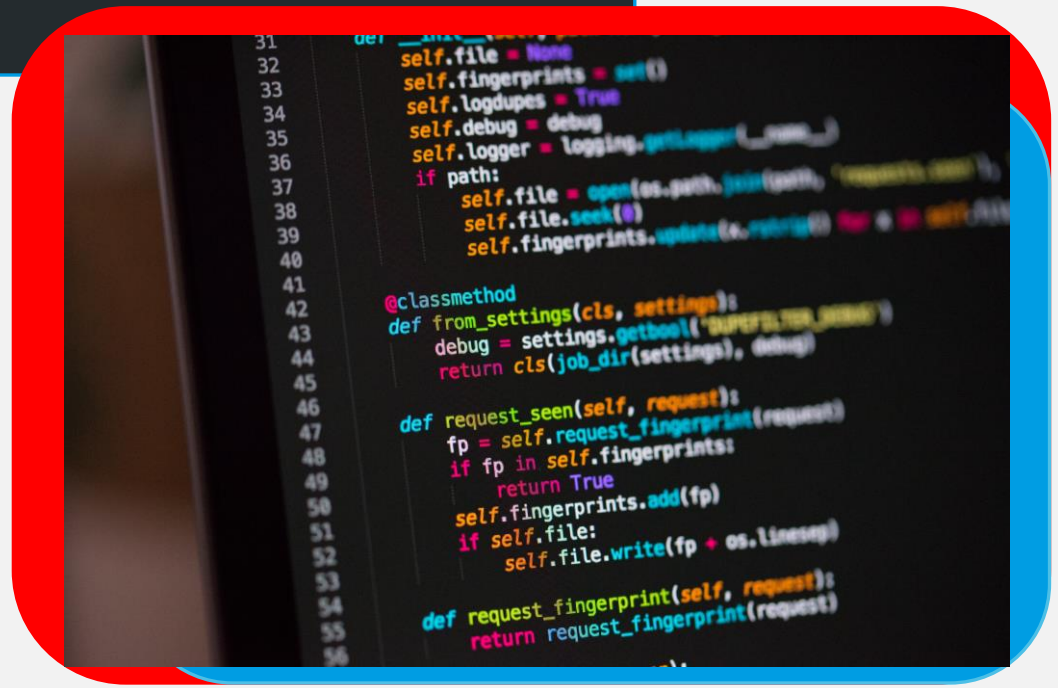
If you want to create another script but don't want a new folder created, you can just create new file. Its kinda similar to the tabs on Chrome or Microsoft Edge.
Just follow the example :



Basic Syntax

Program **code** is made up of symbols (letters, numbers and special characters) used to create a program. These symbols, arranged in a specific way, form the **syntax** of a program.

Code is placed inside a file, which is then **executed**, or **run**, at which point the computer will carry out the instructions prescribed within the code.

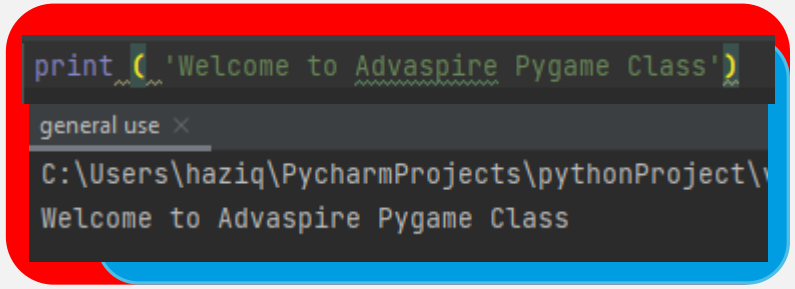


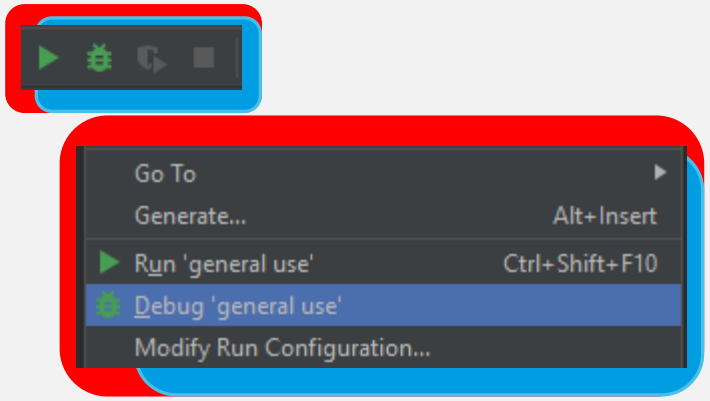
Let’s try something easy.

Print function is used when you want to display something in the terminal.
We will go through this in more detail in the next lesson.

For now,try copy paste the line below in your terminal and click run to see what happen. You can use either right click then run or you can click the run button on top right of your screen.

print (‘Welcome to Python!’)

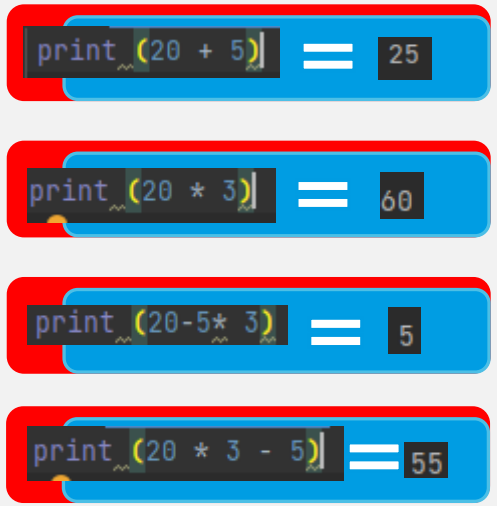




Do Math Using Python

If you are familiar with Scratch programming, you must know that it can do basic math equation.
Same goes to Python, you can also use it to do math equation.
To calculate using python, you need to write: print (number + number).
The + can be changed to another operator. Then when run, it will give the answer in the terminal

+ = Add
- = Subtract
* = Multiply
/ = Division



You can direct message your teacher and ask your question through Slack Robotene Community or arrange a One-to-One Consultation with your teacher.

Any Questions?

Thank you :)