



## Lab 1: Getting Started with Python

### Objective(s)

- Install PyCharm and run your first script.
- Create and run .py files.

### Tool(s)/Software

- PyCharm  
or
- IDLE(Python 3.10 or above)  
or
- <https://www.online-python.com/>

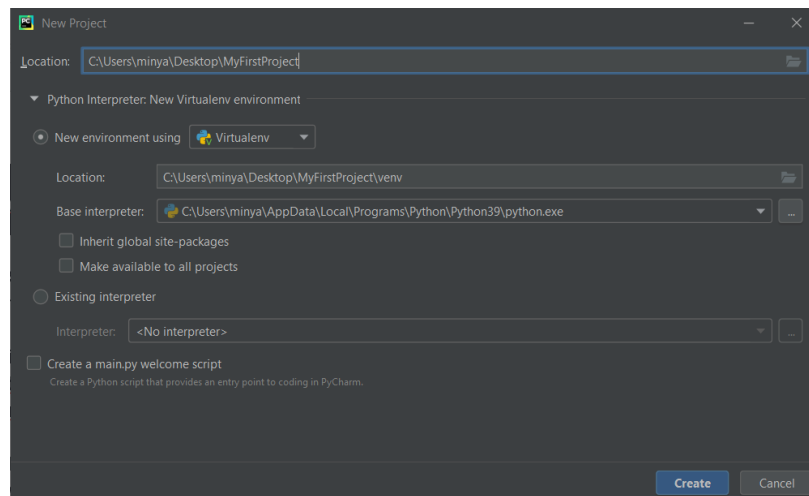
### Description

#### Setup of PyCharm as the following:

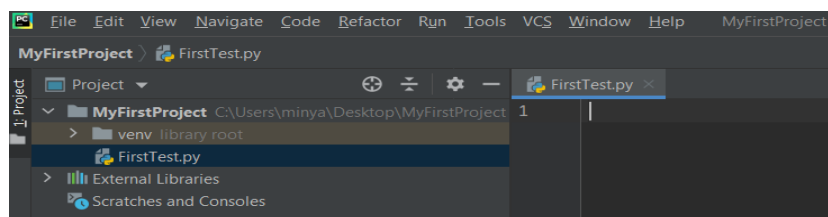
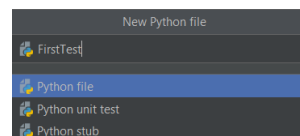
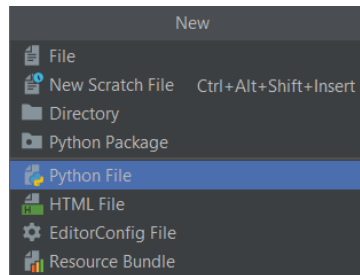
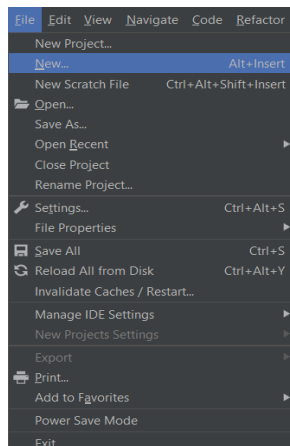
1. Download python from [www.python.org](http://www.python.org)
2. Install Python.11 following the default settings:
  - You can choose to check the “Install launcher for all users (recommended)” or not – either way should be OK
  - You can choose to “Add Python 3.11 to PATH” or not – either way should be OK.
  - You can choose to “Customize Installation” if you want, especially if you want to install to a location other than the default one shown.
3. Now you have installed Python. That means you will be able to run Python files and use the **IDLE Python editor** on your computer.
4. Download PyCharm from [www.jetbrains.com/pycharm](http://www.jetbrains.com/pycharm). Choose **Community version**.
5. The setup wizard should have started. Click on “**Next**”. We will install PyCharm in the suggested location. If you want to enter a new installation location, Click on “**Browse**”, and when you are done selecting the location, click on “**Next**”.
6. You can choose to select two options, after which you click on “**Next**”
  - You can create a desktop shortcut. This will put a link to PyCharm on your desktop.



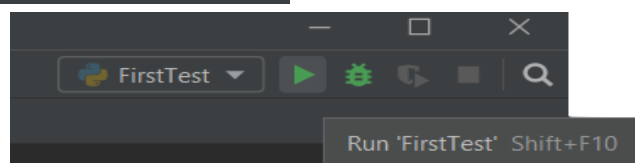
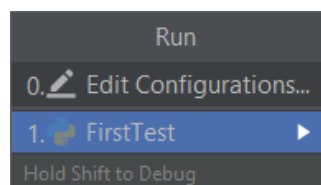
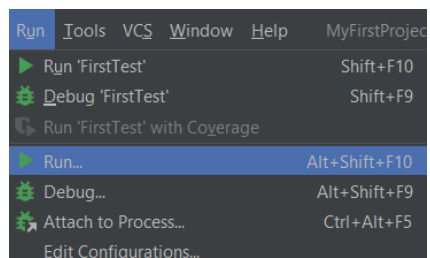
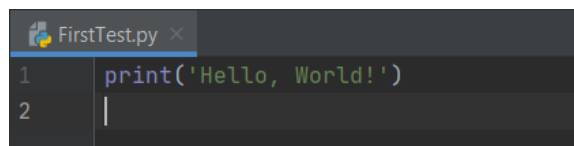
- You can create associations. This means that when you open a python file (one with a .py extension), it will open in PyCharm.
7. Choose a start menu folder (we suggest leaving the default “Jetbrains” selected, but you can change it if you want) and click on “**Install**”.
  8. You have now installed **PyCharm** and open the it from your programs(start menu).
    - The first time you run PyCharm, you will get a message box asking about importing settings.
    - You can select “Do not import settings” and click on “OK”.
    - The first time you run PyCharm, you will need to accept the privacy policy.
  9. Click on “**Create New Project**”.
  10. You will need to select a **location**.
  11. You can select where you want the project to be created (in our case we will create a project named MyFirstProject on the Desktop).
  12. PyCharm should have found the **Python interpreter** you installed earlier. It will be selected if so.
  13. Since we don’t want now to create a welcome script, uncheck “Create a main.py welcome script”, and click the “Create” Button when you have the project set up.



14. Try creating and running a program. Go up to the “**File**” menu and select “**New**”.
15. Select “**Python File**”.
16. Type the name of the file you want (for example “FirstTest”) and press “**Enter**”.



17. Go up to the “**Run**” menu and select “**Run**” (with the green arrow) to run your program.



### Write python programs that solve the following problems:

#### Q1:

Write a Python program that will display a greeting message with your name and city. You should assign your name and city to variables.

#### Example of output:

*Hello,Ahmed from Dammam.*

#### Q2:

Write a Python program that prints the square of 10.

#### Q3:

Write a Python program that prints the product of two numbers: A=5, B=3.

#### Q4

Write a Python program that prints the area of triangle with base =10 and height =7.

**Hint:** Area of triangle= $1/2*B*H$

#### Q5:

Write a Python program that will display the time that will take if you want to travel by car from Dammam to Riyadh (Distance= 394 km) with a speed=110 km per hour.

**Hint:** Time=Distance/speed

### Deliverables

- Submit the file via blackboard. If blackboard is not working, send an email.
- No submissions or late submissions are penalized (from participation marks).
- Name the document Python\_Lab1\_StudentName\_Q5.
- You need to submit all questions in one file.