Leaders' School & College Chattogram

Class: VII (Bangla Version)

L#01

Topic Name: Introduction to Python Programming

Md. Amin Kaiser

B.Sc. in CSE, DUET

Assistant Teacher(ICT)

E-mail: aminkaiser90@gmail.com

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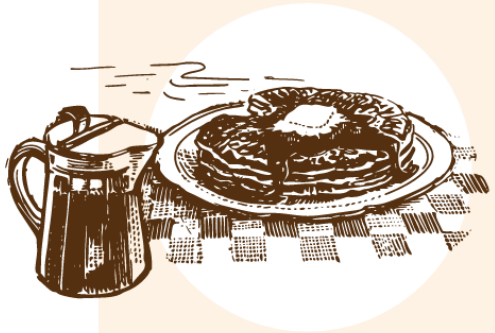
Have you Ever Made a Recipe?

Pancake

Easy Recipe

Ingredients

- 250g plain flour
- 1/2 tsp baking soda
- 1/2 tsp salt
- 1 tsp sugar
- 1 egg
- 250ml buttermilk



Directions

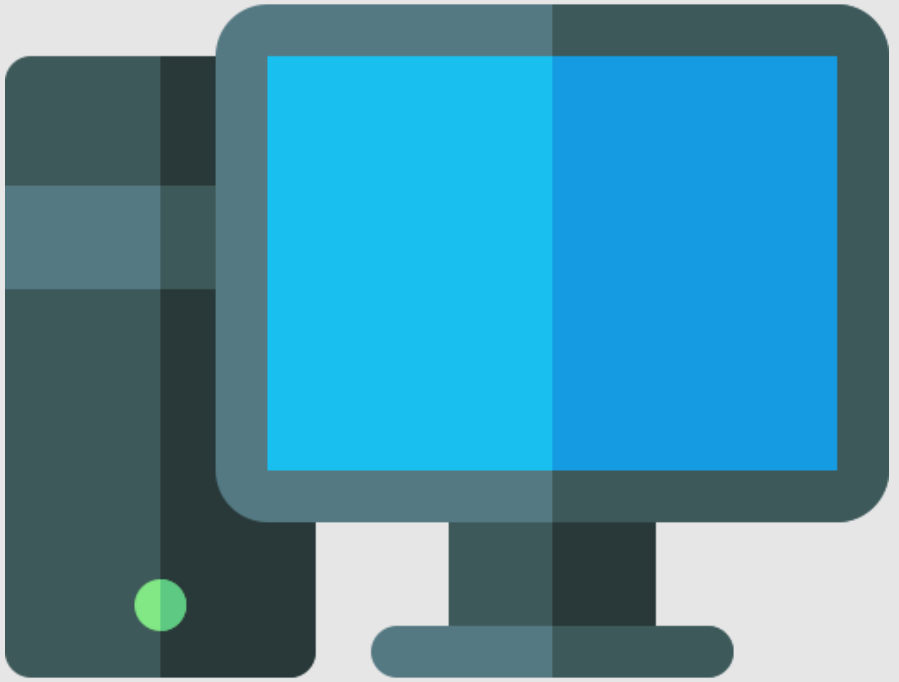
- Sift the dry ingredients in a bowl.
- Make a hole in the middle and add the egg.
- Mix them quickly after breaking the yolk and pouring in the buttermilk until they become stick batter .
- Do not beat when mixing as gluten will appears in the flour, which will prevent the pancakes from rising.
- Fry the mixture in hot griddle pan and served when it is still hot

❑ **We need to Follow some instructions!**

❑ **Finally, we will be able to make a delicious item.**

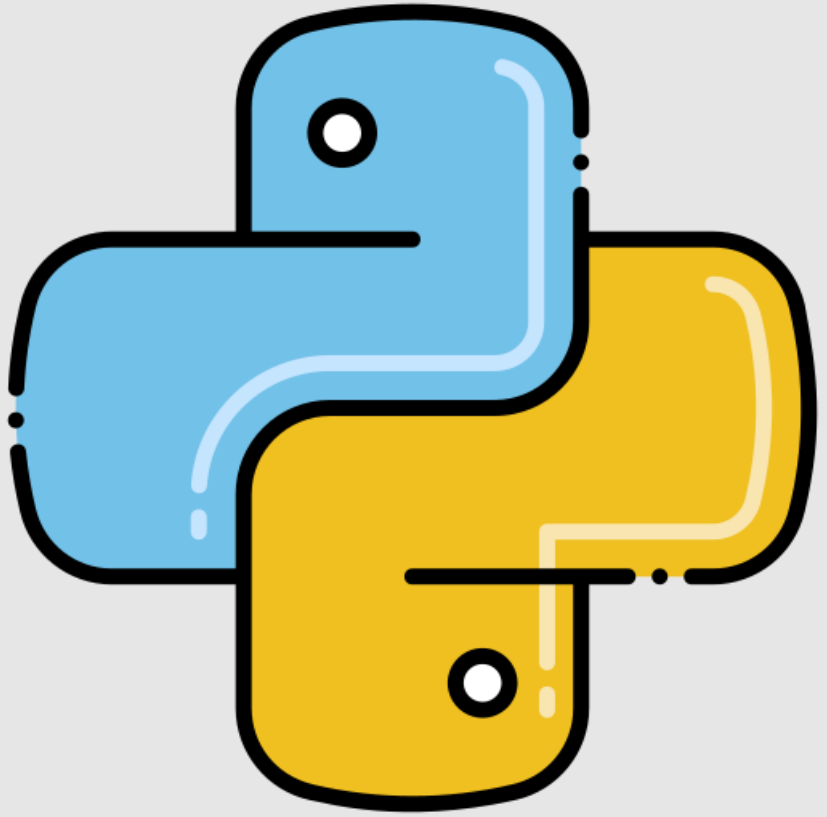
What is Programming?

- Computer only understand 0 and 1
- We need to give instructions to a computer on what to do
- Program is a set of instructions to do a particular task



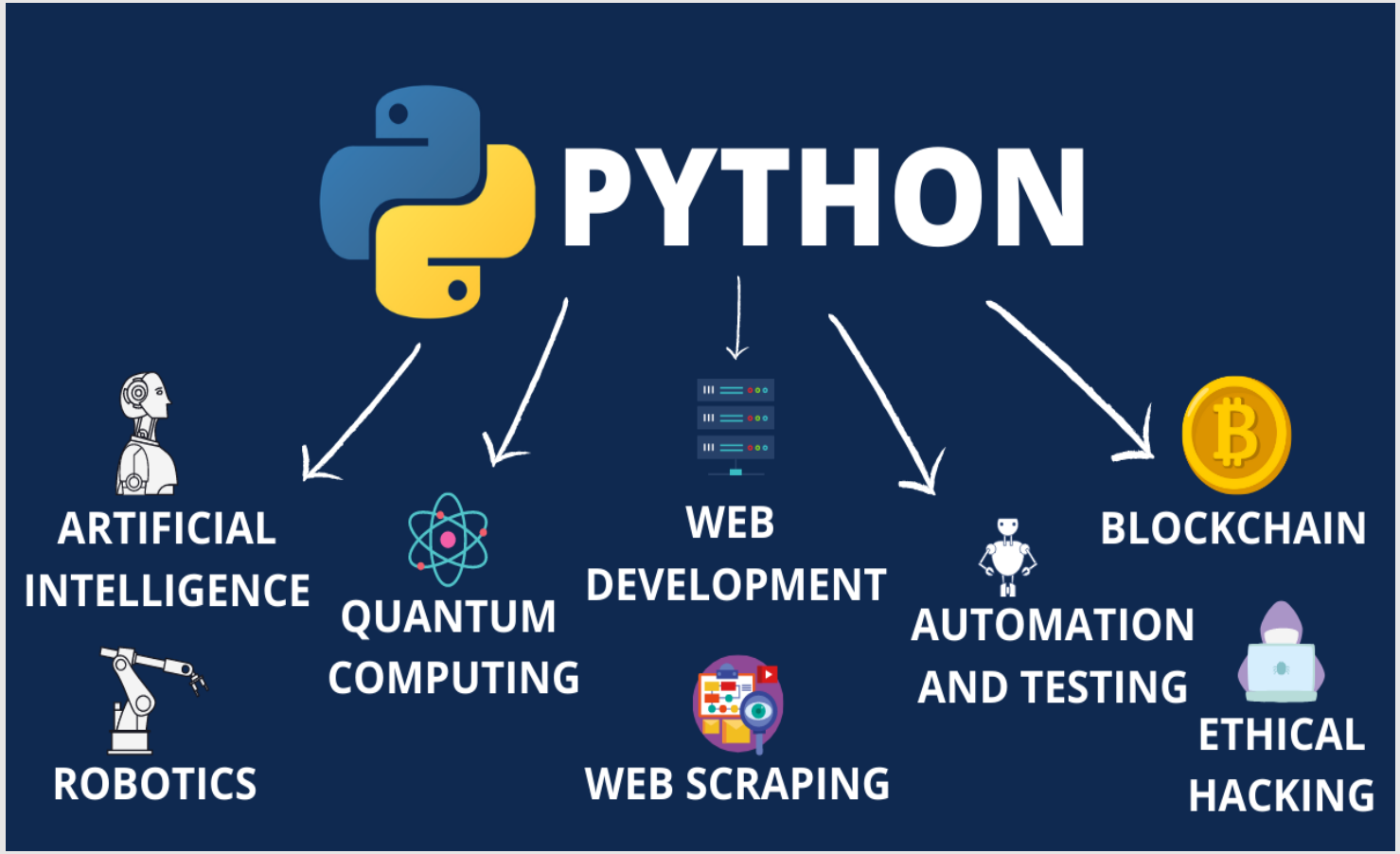
What is Programming Language?

- We use language to communicate with each other
- To communicate with computer: for giving instructions, we need to use a language
- Python is one kind of Programming Language
- C, C++, Java, C#, JavaScript etc.



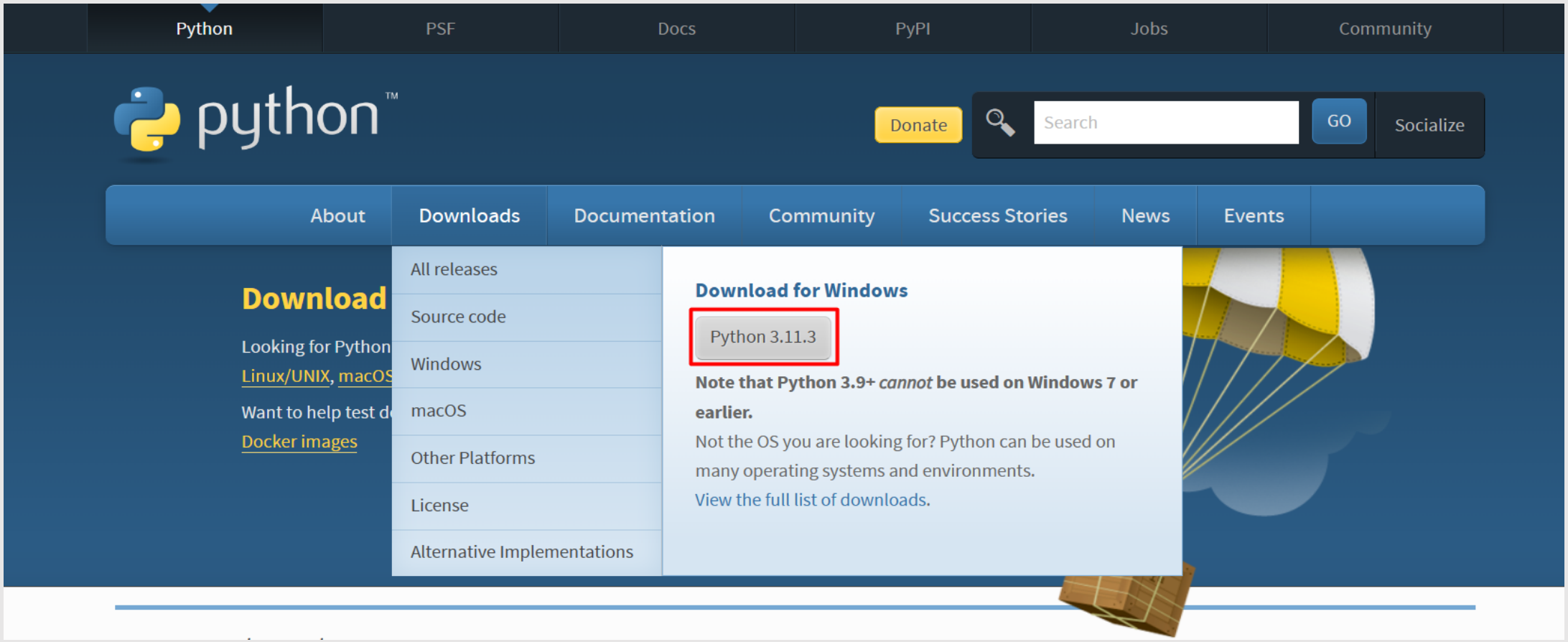
Why we choose Python?

- ❑ **Easy to learn and read**
- ❑ **Versatile: Web Development, Data Analysis, Scientific Computing, Artificial Intelligence, Machine Learning, Automation**



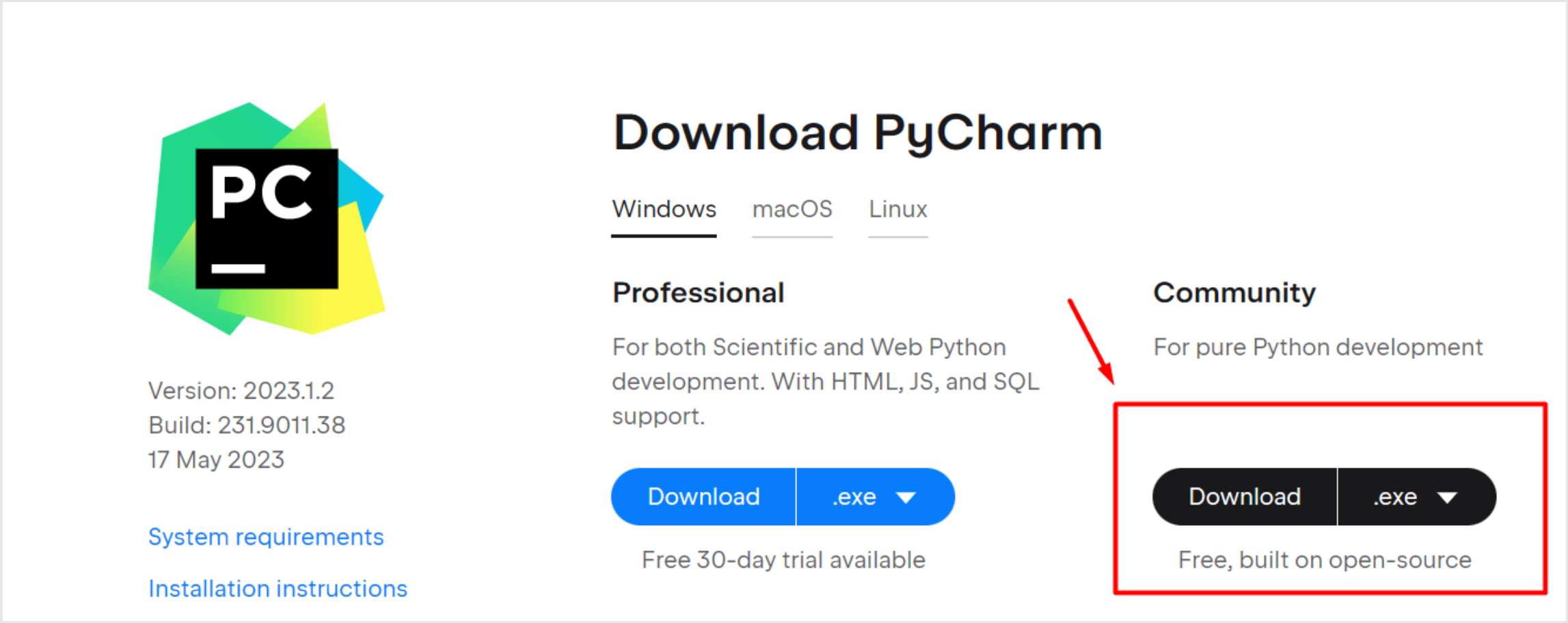
Creating Environment: Installing Python and PyCharm

- **To install Python: visit**
  https://www.python.org/downloads/ -



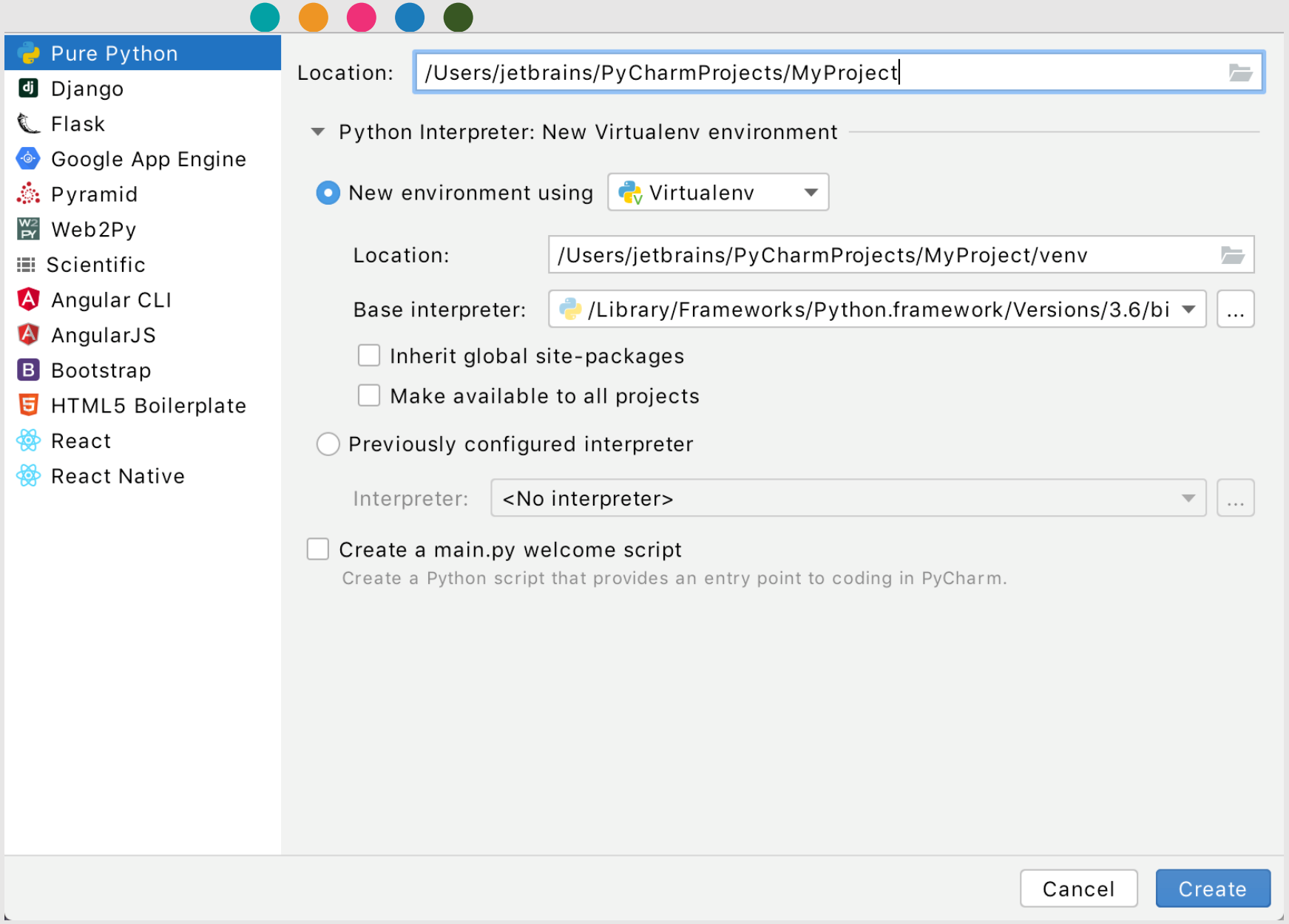
Creating Environment: Installing Python and PyCharm

- **To install PyCharm: visit**
  https://www.jetbrains.com/pycharm/download/



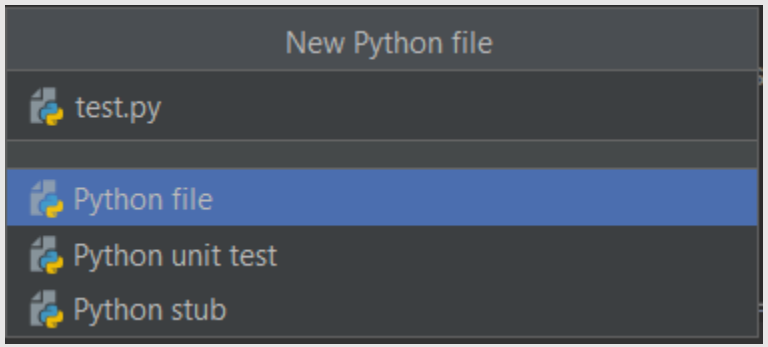
Creating Environment: Your First Python Project

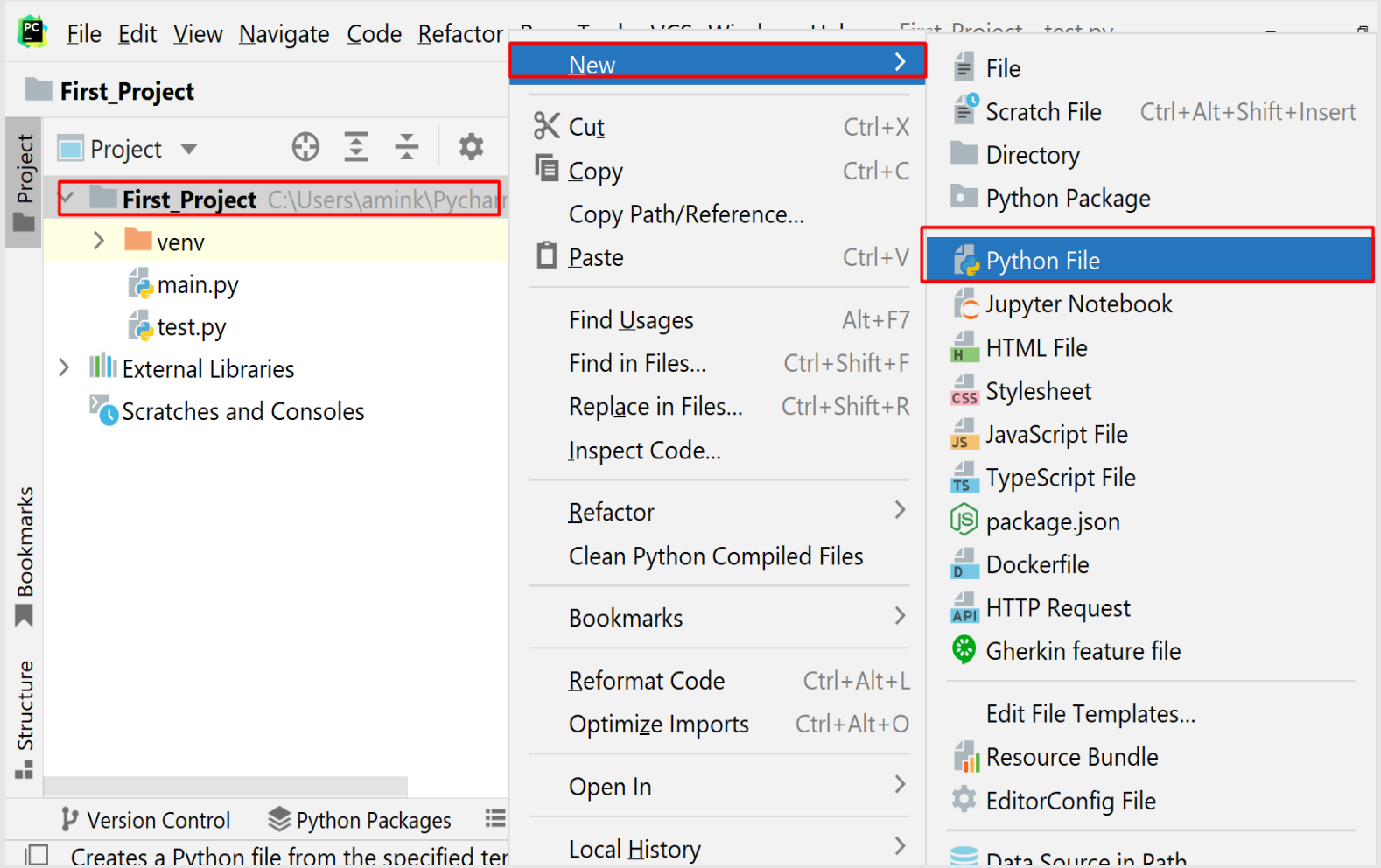
- If you're on the Welcome screen, click **New Project.**
- If you've already got any project open, choose **File | New Project** from the main menu.



Creating Environment: Your First Python Project

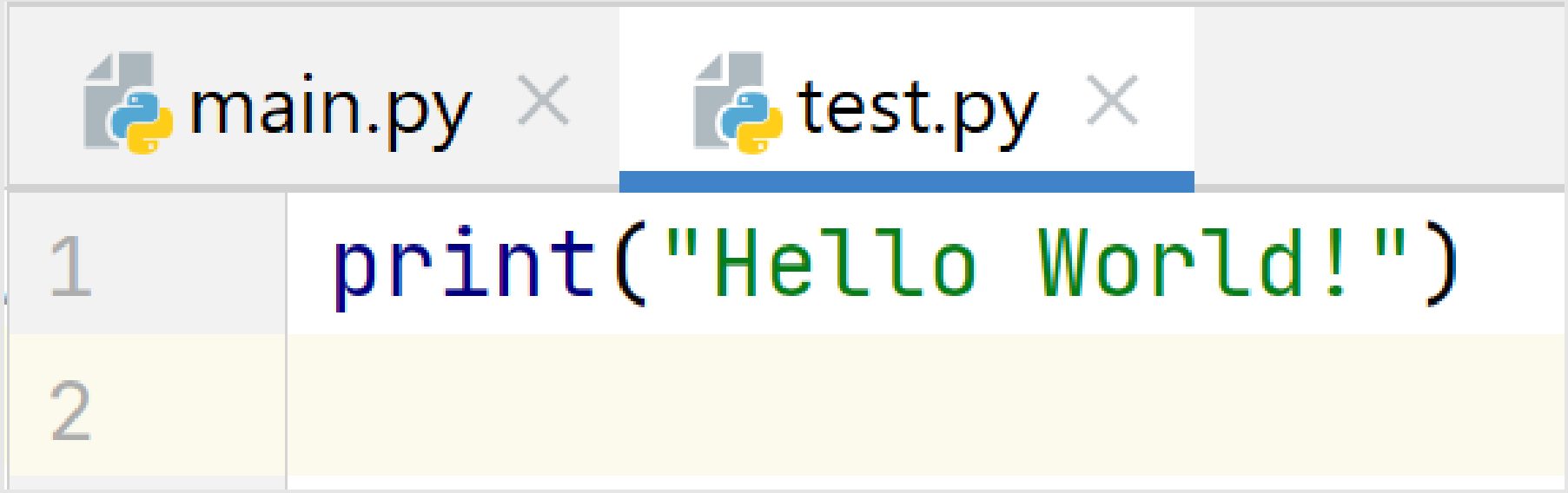
- In the **Project** tool window, select the project root (typically, it is the root node in the project tree), right-click it, and select **File | New> Python File**
- **Type a File name.py(test.py)**





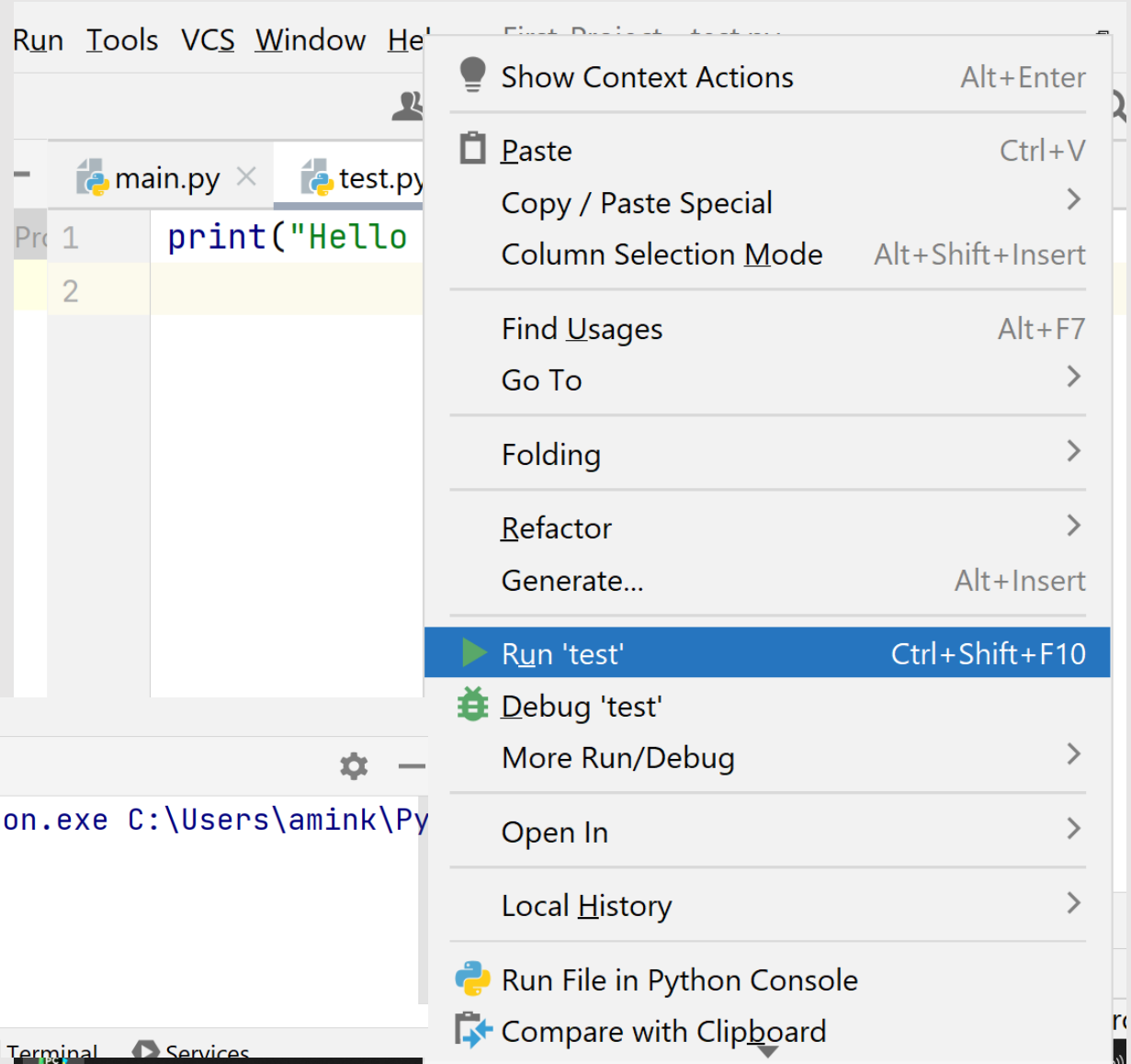
Your First Python Program: Print a Message!

- print("Your Message")



Run Your Program

- Right-click the editor and select **Run 'test'** from the context menu
- Press Ctrl+Shift+F10
- Since this Python script contains a main function, you can click an icon  in the gutter.
- Output:



Mathematical Operations on print()

main.py | test.py

```
1  print(10+5)
2  print(10-5)
3  print(10*5)
4  print(10/5)
```

❑ Output:

```
C:\User
15
5
50
2.0
```

Test!

- Print Your Name, Roll, Class, School Name on Output Screen

```
Name: Amin Kaiser
Roll: 03
Class: 07
School Name: Leaders' School and College
```

Solution!

- Print Your Name, Roll, Class, School Name on Output Screen

main.py | test.py

```
1  print("Name: Amin Kaiser")
2  print("Roll: 03")
3  print("Class: 07")
4  print("School Name: Leaders' School and College")
```

Q/A Session