

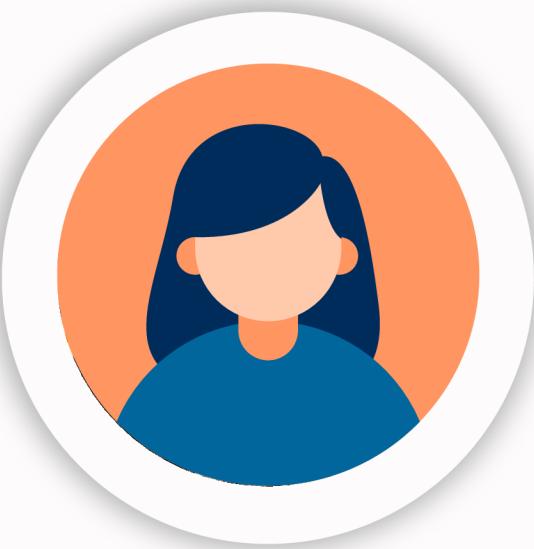


Python For Beginners

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Trainers & Moderators



Sana Qaisar



AaMna AnSari

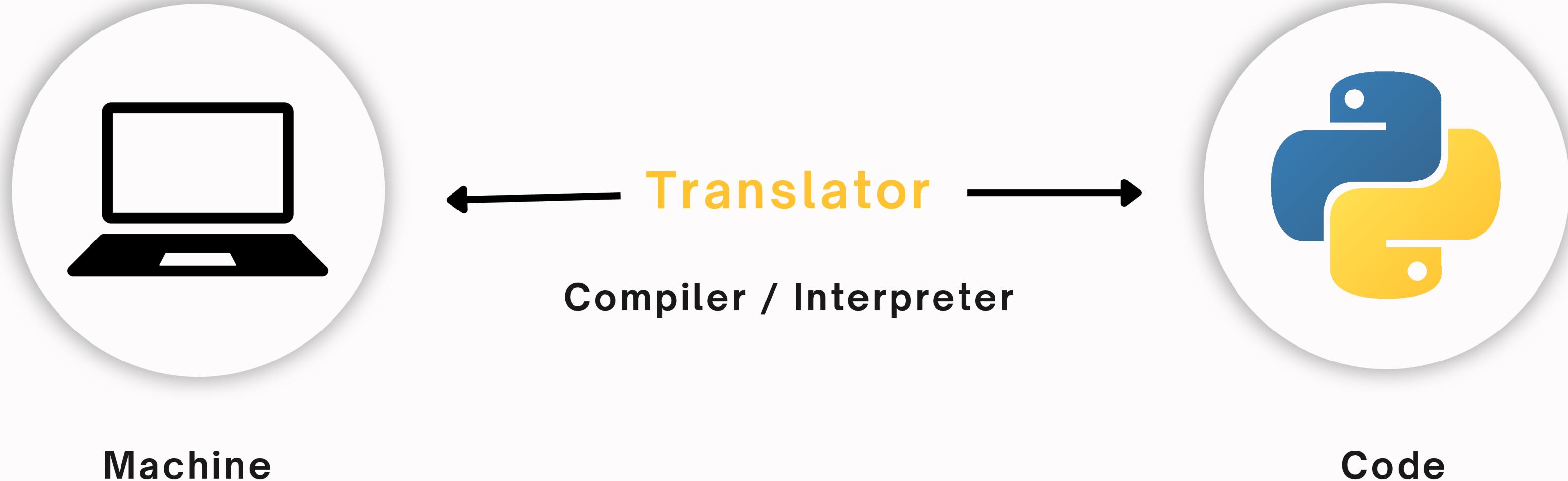


Maaz Irfan



Aaqib Ali

Programming



What is Python

Python is a very popular general-purpose interpreted, interactive, object-oriented, and high-level programming language.



History of Python

Python was developed by **Guido van Rossum**

The first version (0.9) was released on **February 20, 1991**.

The name of the Python programming language comes from an old **BBC television** comedy sketch series called **Monty Python's Flying Circus**.



Features of Python

1 Simple Syntax

2 Easy to Learn

3 High-Level Language

4 Versatile Language

5 Portable Language

6 Standard Library

7 Object-Oriented

8 Open Source & Free



Features of Python

Simple Syntax

C

```
#include <stdio.h>
int main() {
    printf("Hello, World!");
    return 0;
}
```

JAVA

```
public class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello, World!");
    }
}
```

PHP

```
<?php
echo "Hello, World!";
?>
```

Python

```
print("Hello, World!")
```



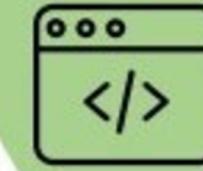
Application of Python

Internet of
Things

Web
Development

Network
Programming

Artificial
Intelligence



Machine
Learning

Data Science

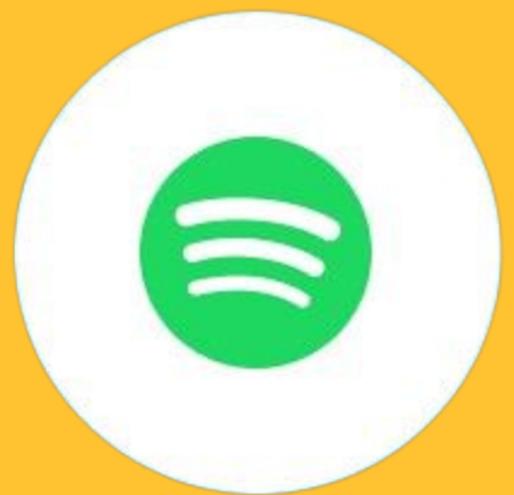
Game
Development

Mobile Apps

Business
Applications



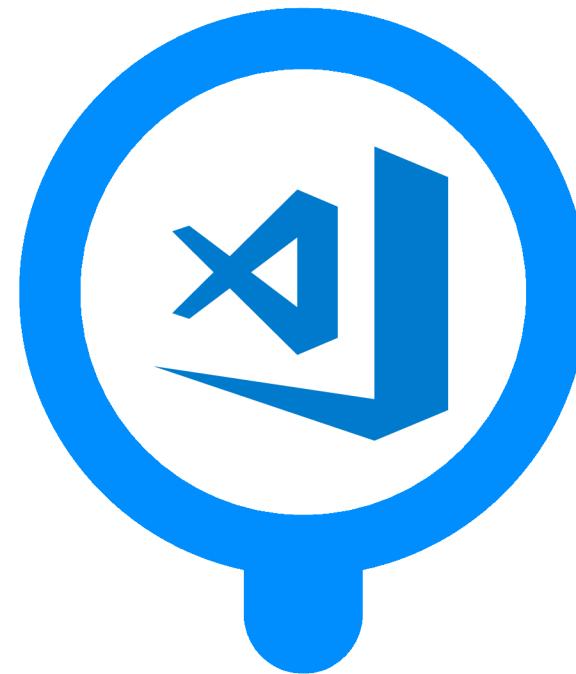
Top Companies using Python



What IDE is used for Python?



PyCharm



Visual Studio
Code



Jupyter



Spyder



Google Colab



Google Colab

Steps to use Colab

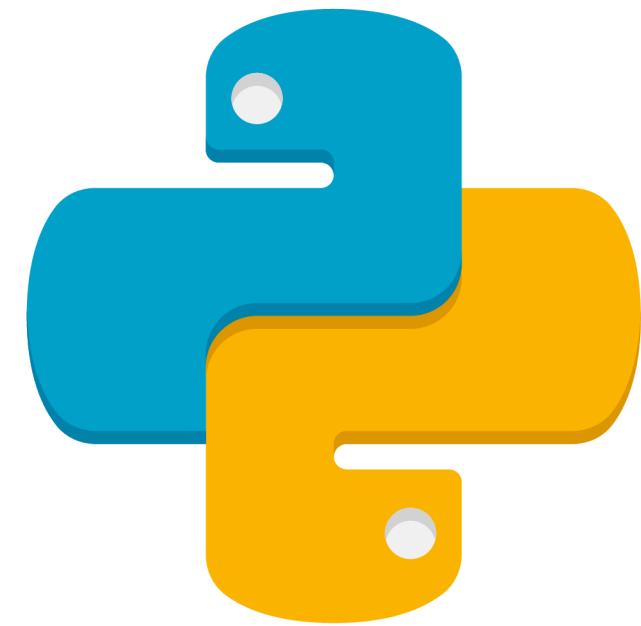
Open Google Colab: Go to [Google Colab](#) and sign in with your Google account.
<https://colab.research.google.com/>

Create a New Notebook: Once you're on the Google Colab interface, click on ***File > New notebook*** to create a new notebook.

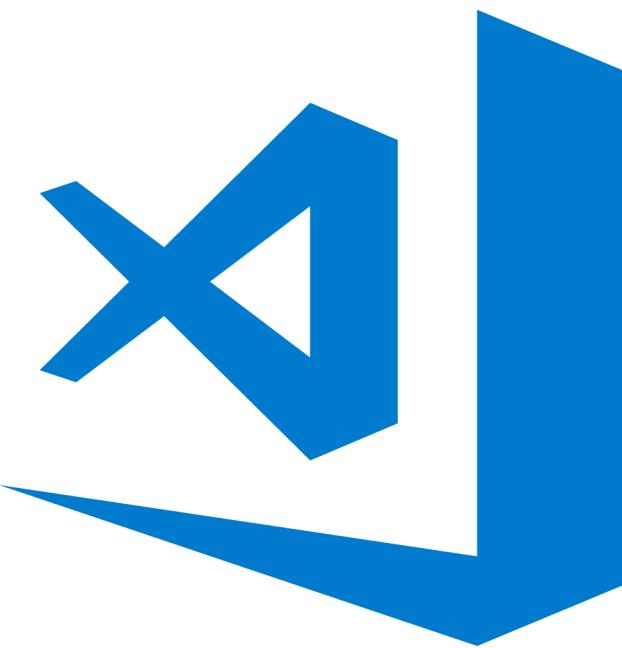


VS Code

To write and run **Python** code on **Visual Studio Code (VS Code)** on Windows, you'll need to download and install both Python and VS Code.



Python



VS Code

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Python

Download and Install Python

- **Go to the Python website:** Open your web browser and go to the official Python download page: <https://www.python.org/downloads/>
- **Download Python:** Click the "Download Python" button. It will automatically select the latest version for Windows.
- **Run the installer:** Once the download is complete, run the installer. Make sure to check the box that says "**Add Python to PATH**" before clicking the "**Install Now**" button. This ensures that you can run Python from the command line.
- **Complete the installation:** Follow the on-screen instructions to complete the installation.



Visual Studio Code

Download and Install Visual Studio Code

- **Go to the VS Code website:** Open your web browser and go to the official Visual Studio Code download page: <https://code.visualstudio.com/Download>.
- **Download VS Code:** Click the "Windows" button to download the installer for Windows.
- **Run the installer:** Once the download is complete, run the installer. Follow the on-screen instructions to complete the installation. You can choose to create a desktop icon and add "Open with Code" action to the Windows Explorer context menu for easier access.



Visual Studio Code

Set Up VS Code for Python Development

- **Open VS Code:** Launch Visual Studio Code from the Start menu or desktop shortcut.
- **Install Python extension:** Click on the Extensions icon on the left sidebar (or press Ctrl+Shift+X), and in the search bar, type "**Python**". Install the extension provided by Microsoft.
- **Select the Python interpreter:** Once the extension is installed, open the command palette by pressing Ctrl+Shift+P, type "Python: Select Interpreter", and select the Python interpreter you installed in Step 1.
- **Create a new Python file:** Open a new file (Ctrl+N), and save it with a .py extension (e.g., hello.py).
- **Write and run your code:** Write your Python code in the file and run it by right-clicking inside the file and selecting "*Run Python File in Terminal*" or simply press **F5**.



Tips for Active Participation in Class:

- It's a user-friendly session; it's your class, so actively participate in the session.
- If you don't understand something, please raise your hand, unmute yourself and ask the question.
- Remember, One question not only helps you but also clarifies ideas and concepts for everyone in the class.
- You can also ask questions in the chat, but I advise you to unmute yourself for a more engaging session and to boost your confidence.

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