



Python For Beginners

www.icode.guru/join



Trainers & Moderators



Fatima Arshad



AaMna AnSari



Shaista Zulifqar



M. Haris Ahsan

Programming



Machine

← **Translator** →

Compiler / Interpreter



Code

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

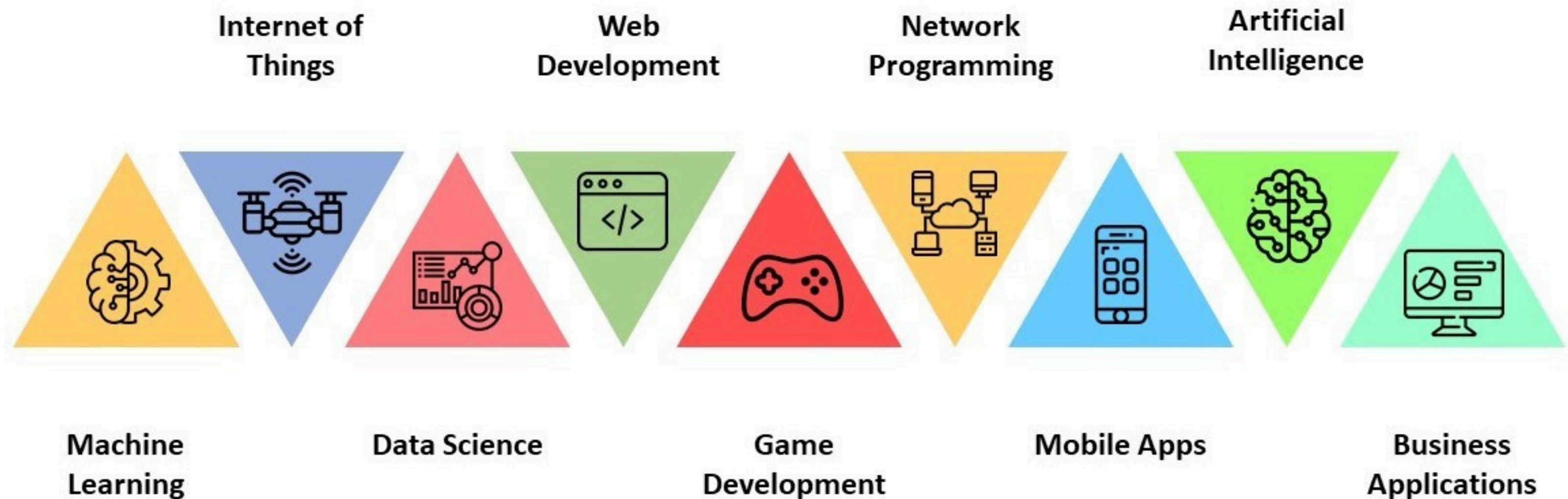
```
<?php
echo "Hello, World!";
?>
```

Python

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



Application of Python



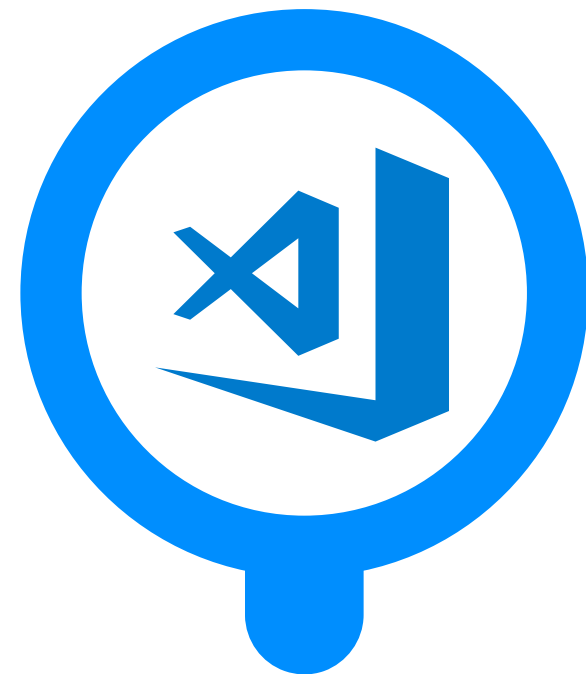
Top Companies using Python



What IDE is used for Python?



PyCharm



Visual Studio
Code



Jupyter



Spyder



Google Colab

Google Colab

Steps to use Colab

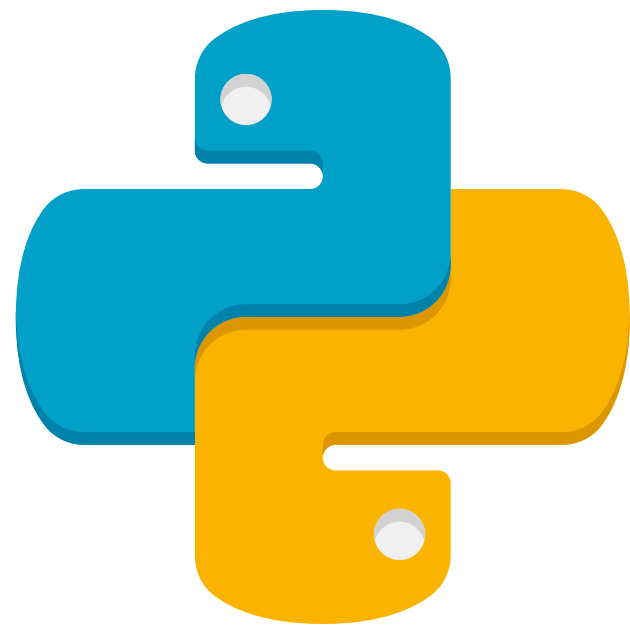
Open Google Colab: Go to Google Colab and sign in with your Google account.
<https://colab.research.google.com/>

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

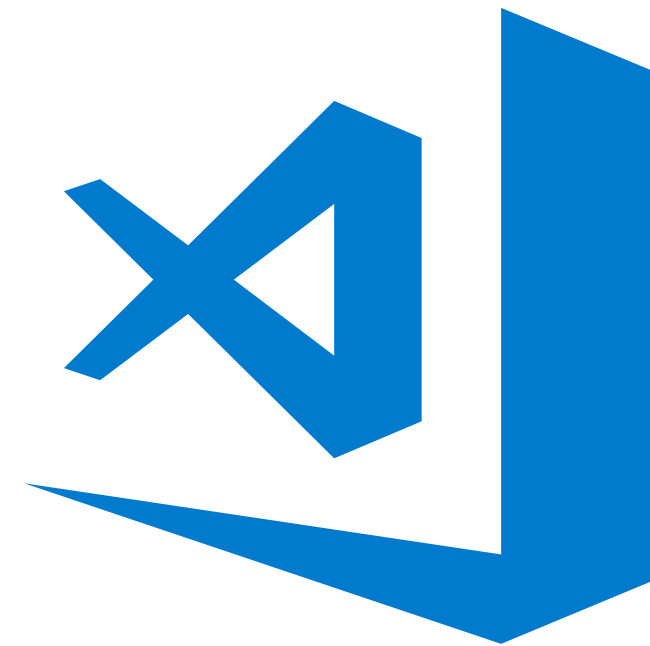


VS Code

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

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.

