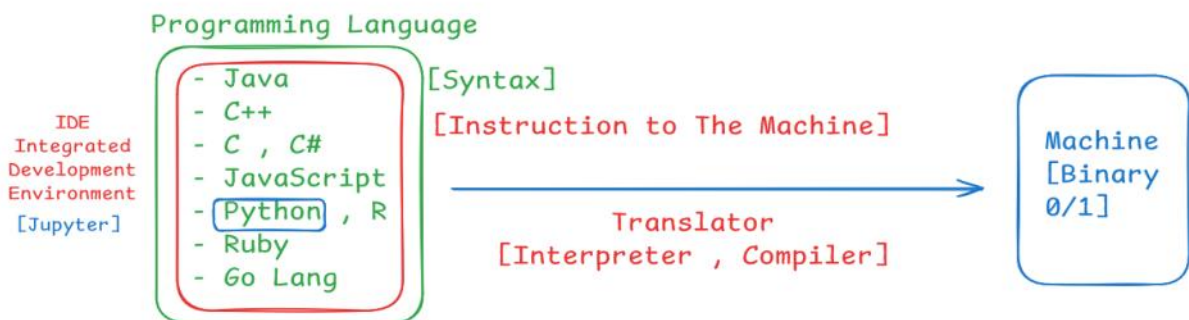# Introduction to Python-I

🎯 Session Objectives

🔍 Understand what Python is

🎮 Explore what Python can do

✨ Discover Python's features

⚖️ Compare Python with other programming languages

📈 Understand how Python differs from Excel and SQL

🖌️ Learn Python's role in Data Science

🖥️ Install Python and Anaconda (Jupyter Notebook)

What is Programming Language?

Person A [Speaks French]   Translator
Person B [Speaks Hindi]

Mode of Communication to express thoughts.

A communication between 2 persons on a common ground...

Programming Language

IDE
Integrated
Development
Environment

[Jupyter]

- Java
- C++
- C , C#
- JavaScript
- Python , R
- Ruby
- Go Lang

[Syntax]

[Instruction to The Machine]

Translator
[Interpreter , Compiler]

Machine
[Binary
0/1]

Bhai Lang - Toy Programming

```
hi bhai
  bol bhai "Hello World";

  bhai ye hai a = 3;
  bhai ye hai b = 0;

  jab tak bhai (b < 5) {
    bol bhai b;

    agar bhai (b == a) {
      bol bhai "b is equal to a";
    } nahi to bhai (b == 0) {
      bol bhai "b is equal to zero";
    }

    b += 1;
  }
```
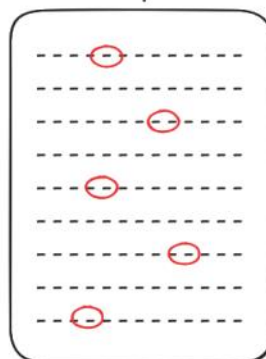
Interpreter

[Line By Line Error]

Compiler [Full Scan]
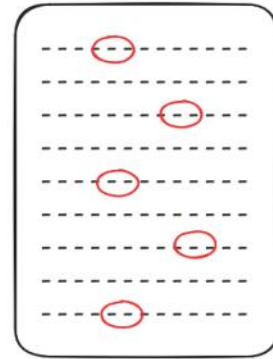
Line1 : Error....
Line3 : Error....
Line5 : Error....
Line7 : Error....
Line9 : Error....

Pseudo-code [Step By Step Process]

How to make a Maggie 🍜🍜

```
Step 1 : Buy a Maggie , Buy a Stove/Pan , Have a Gas Pipeline...
Step 2 : Turn on Stove
Step 3 : Open the Packet / Pour a Water / Boil it.
Step 4 : Add Vegetables if you have else skip
Step 5 : Add a Maggie Masala
Step 6 : Stir it for 5 minutes
Step 7 : Maggie is Ready, Serve it hot 😎
```

Features of Python

```
1. Easy Syntax. Easy to Understand [Beginner Friendly] ['C-Python']
2. Great Community [Used By Worldwide....]
3. Open Source - Free Libraries for Multiple Purpose... [Rich in Libraries]
4. It is Programming Language.
5. High Level Language.
6. Object Oriented Programming [4 Pillars]
[Abstraction,Encapsulation,Inheritance,Polymorphism]
7. .byte code -> Platform Independent -> .py
```

Installing Anaconda Navigator....

○ Anaconda3 2025.12-2 (64-bit) Setup — ☐ ✕

Welcome to Anaconda3 2025.12-2 (64-bit) Setup

Setup will guide you through the installation of Anaconda3 2025.12-2 (64-bit).

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.

ANACONDA.

[Next >] [Cancel]

License Agreement

Anaconda3 2025.12-2 (64-bit) Setup

License Agreement
Please review the license terms before installing Anaconda3 2025.12-2 (64-bit).

Press Page Down to see the rest of the agreement.

By continuing installation, you hereby consent to the Anaconda Terms of Service available at https://anaconda.com/legal.

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Anaconda3 2025.12-2 (64-bit).

Anaconda, Inc.

< Back   **I Agree**   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Select Installation Type
Please select the type of installation you would like to perform for Anaconda3 2025.12-2 (64-bit).

Install for:

● **Just Me (recommended)**

○ All Users (requires admin privileges)

Anaconda, Inc.

< Back   **Next >**   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Choose Install Location
Choose the folder in which to install Anaconda3 2025.12-2 (64-bit).

Setup will install Anaconda3 2025.12-2 (64-bit) in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

Destination Folder

C:\Users\GIGABYTE\anaconda3   Browse...

Space required: 6.1 GB
Space available: 243.4 GB

Anaconda, Inc.

< Back   **Next >**   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Advanced Installation Options
Customize how Anaconda3 integrates with Windows

☑ Create shortcuts (supported packages only).

☐ Add installation to my PATH environment variable

NOT recommended. This can lead to conflicts with other applications. Instead, use the Commmand Prompt and Powershell menus added to the Windows Start Menu.

☐ Register Anaconda3 as my default Python 3.13

Allows other programs, such as VSCode, PyCharm, etc. to automatically detect Anaconda3 as the primary Python 3.13 on the system.

☐ Clear the package cache upon completion

Recommended. Recovers some disk space without harming functionality.

Anaconda, Inc.

< Back   Install   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Installing
Please wait while Anaconda3 2025.12-2 (64-bit) is being installed.

Setting up the package cache...

Show details

Anaconda, Inc.

< Back   Next >   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Installation Complete
Setup was completed successfully.

Completed

Extract: history
Create folder: C:\Users\GIGABYTE\anaconda3\envs
Running post-install...
Delete file: C:\Users\GIGABYTE\anaconda3\.step.log
Created uninstaller: C:\Users\GIGABYTE\anaconda3\Uninstall-Anaconda3.exe
Setting installation directory permissions...
Successfully processed 289740 files; Failed processing 0 files
Delete file: C:\Users\GIGABYTE\anaconda3\.step.log
Done!
Completed

Anaconda, Inc.

< Back   Next >   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Anaconda3 2025.12-2 (64-bit)
Code with Anaconda in the Cloud

Everything you love about Anaconda now available from the cloud with Anaconda's fully-loaded Jupyter notebook.

No setup required. Get started for free.

Code in the cloud with Anaconda Notebooks

ANACONDA. jupyter

Anaconda, Inc.

< Back   Next >   Cancel

Anaconda3 2025.12-2 (64-bit) Setup

Completing Anaconda3 2025.12-2 (64-bit) Setup

Thank you for installing Anaconda Distribution.

Here are some helpful resources to get you started. We recommend you bookmark the 'Getting Started with Anaconda Distribution' link so you can refer back to it later.

☑ Launch Anaconda Navigator

☑ Welcome to Anaconda

< Back   Finish   Cancel