

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 Analytics
- 💻 Install Python and Anaconda (Jupyter Notebook)

What is Programming Language?

A communication between 2 individuals on common ground.

C, C++, Java, Python,
R, JavaScript, C#,
Ruby, Go Lang, Typescript,
PHP, Kotlin, etc.

Python
[Programming
Language]

Interpreter
Compiler

Machine
[0/1 Binary
Format]

Syntax

Code

top
to
bottom



Compiler : Full Scan

interpreter : line by line scan

Set of Instructions :

How to make a Maggie?

- Step 1: Boiling water...
- Step 2: Adding Maggi noodles to boiling water.
- Step 3: Adding tastemaker (masala).
- Step 4: Stirring occasionally and letting it cook...
- Step 5: Maggi is ready! Serve hot 🍜😊

Python 🐍

- It is a programming Language.
- It's a high level language.
- Easy To understand. [Human Readable]
- Handles Large Dataset.
- It's an interpreter language
- Rich in Libraries
- Amazing Support from the community
- Its an platform independent. -> .py



Download

For installation assistance, refer to [troubleshooting](#).

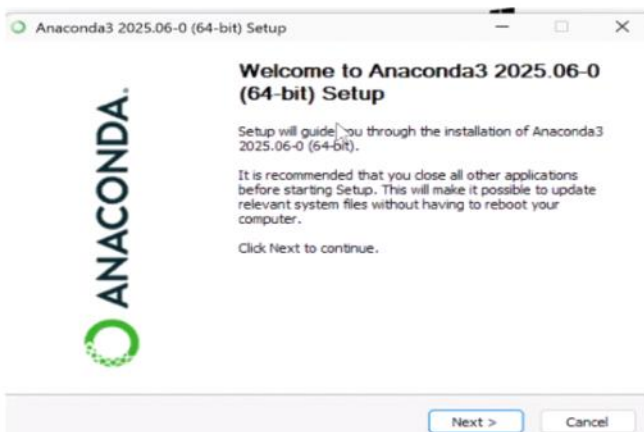
Windows

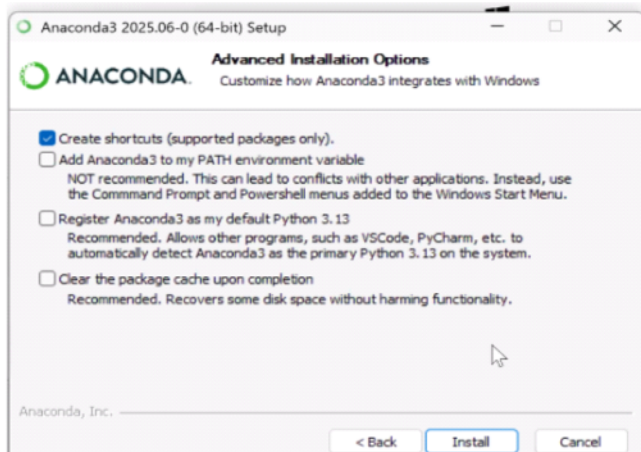
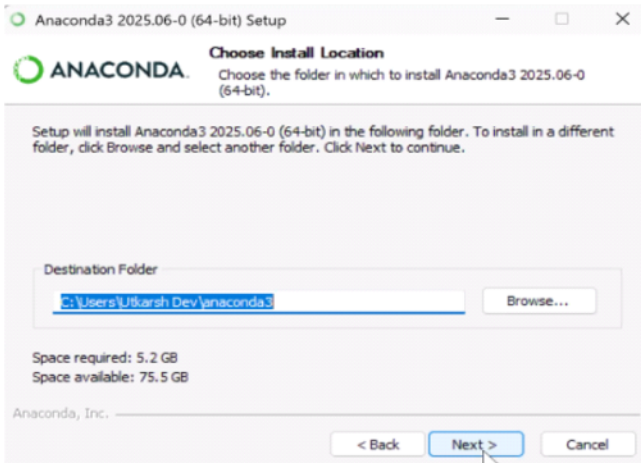
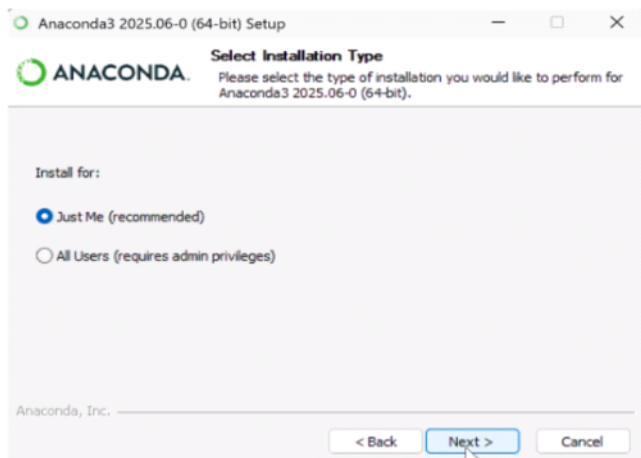
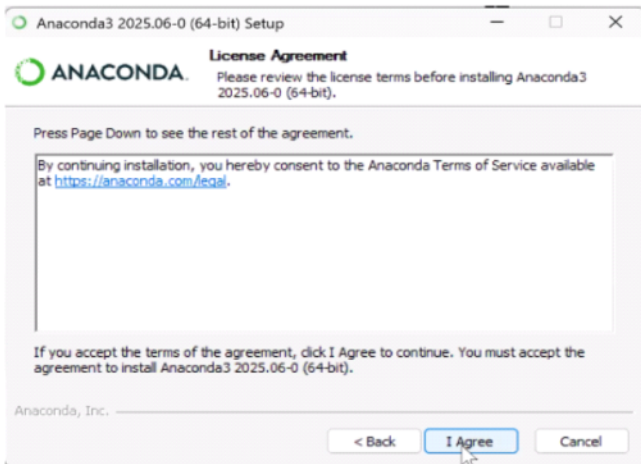
Python 3.13

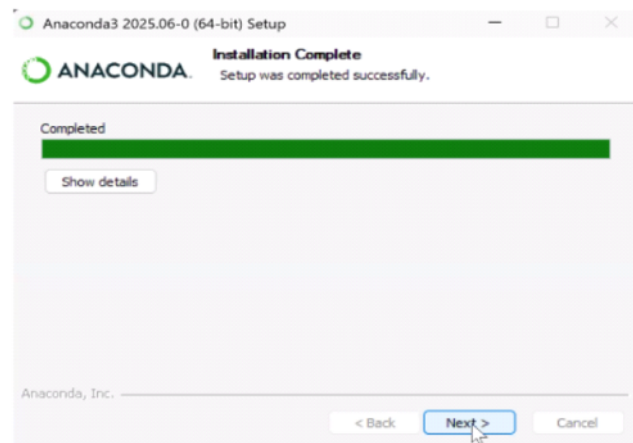
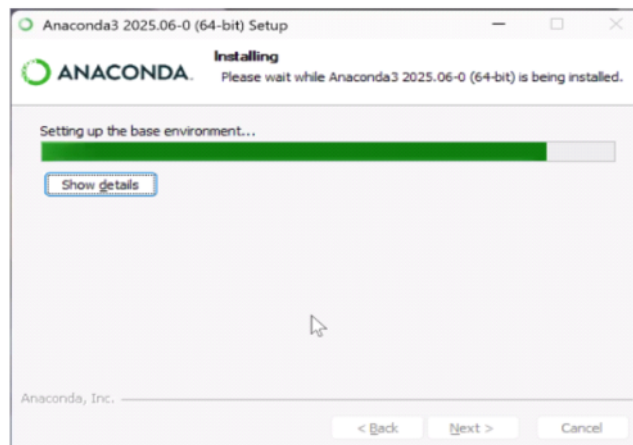
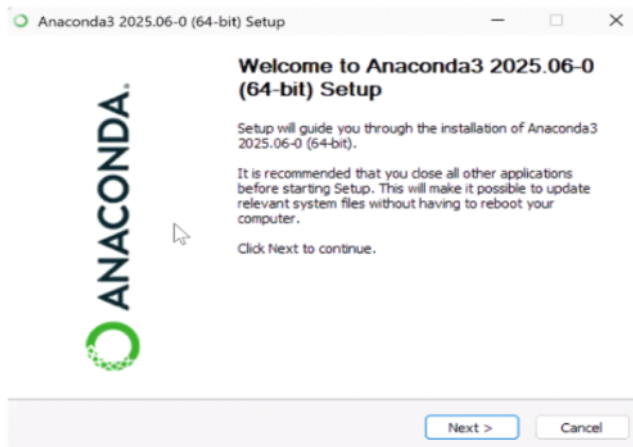
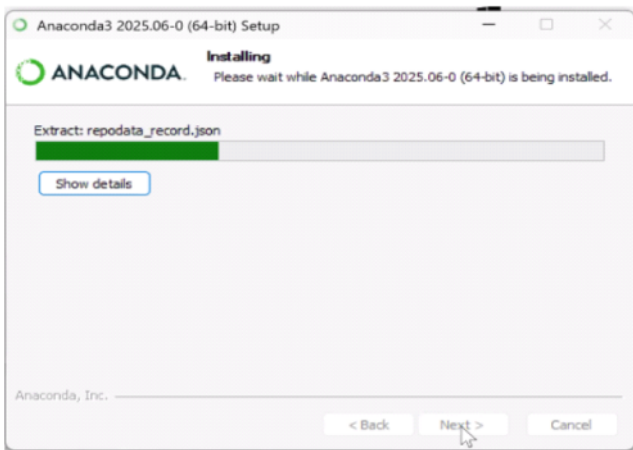
📄 64-Bit Graphical Installer (914M)

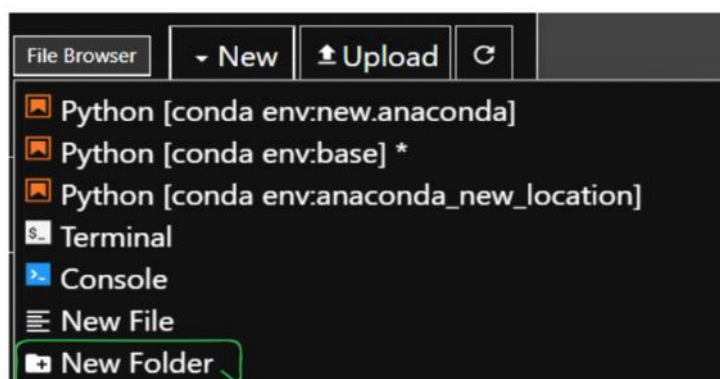
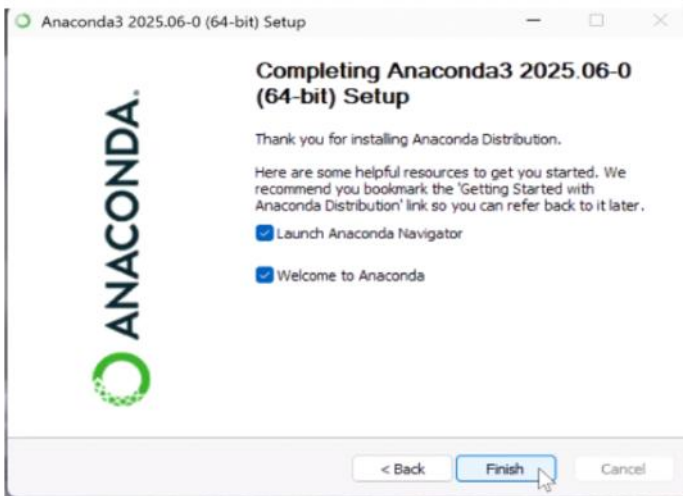
Mac

Linux

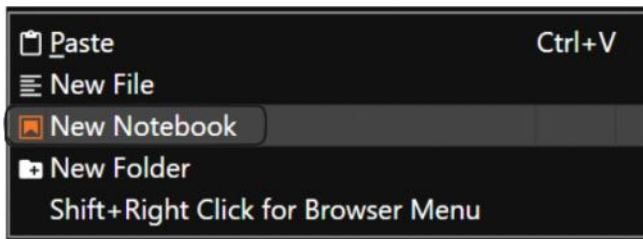




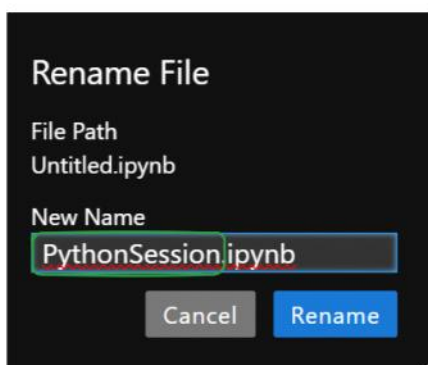
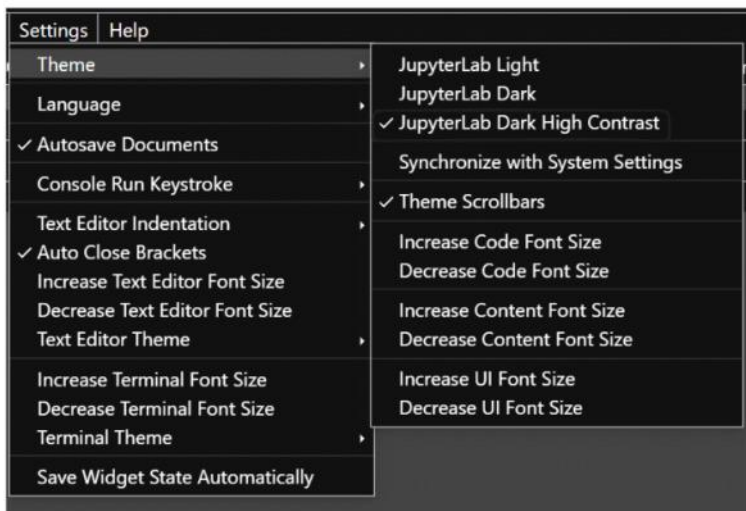
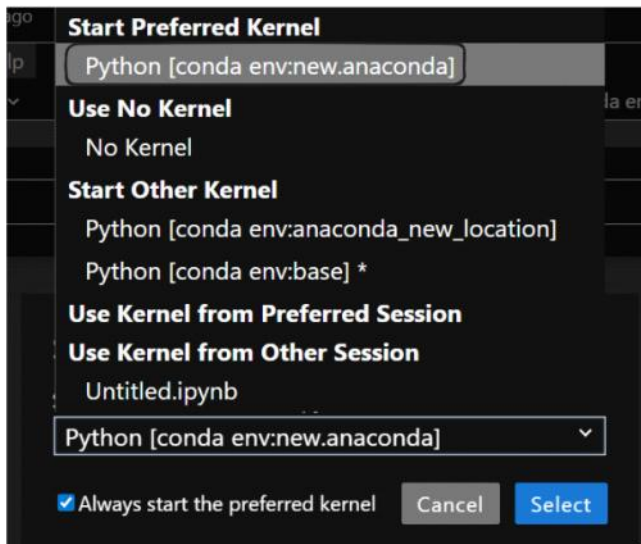


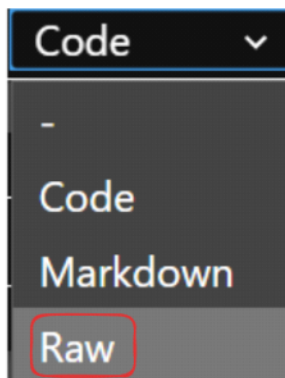


anaconda_projects

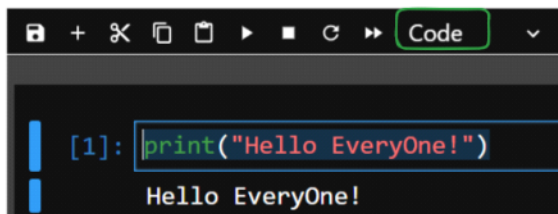


.ipynb





<pre>



```
# Python Programming
#### Let's Learn Together , Grow Together!!
1. Learn Faster!
2. Grow Faster
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```

Python Programming

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```
# Java
int x = 10
System.out.println(x)

# Python
x = 10
print(x)
print(type(x))

10
<class 'int'>

x = "Coding Ninja"
print(x)
print(type(x))

Coding Ninja
<class 'str'>
```

```
x = 'k'
print(x)
print(type(x))

k
<class 'str'>

x = int('10') + 1
print(x)
print(type(x))

11
<class 'int'>

x = 10.5
print(x)
print(type(x))

10.5
<class 'float'>
```

```
x = 9 + 6j
print(x)
print(type(x))

(9+6j)
<class 'complex'>
```

```
# parameters "\n" by default
print("Python")
print("Programming")
```

```
Python
Programming
```

```
print("Python" , end = " ")
print("Programming")
print("Coding is Awesome 🍷")
```

```
Python Programming
Coding is Awesome 🍷
```

```
# seperator -> concat_ws
print("Mon","Tues","Weds","Thurs","Fri")
```

```
Mon Tues Weds Thurs Fri
```

```
print("Mon","Tues","Weds","Thurs","Fri" , sep = " - ")
```

```
Mon - Tues - Weds - Thurs - Fri
```