

What is Python?

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics that can be used for a wide variety of applications. It includes high-level data structures, dynamic typing, dynamic binding, and many more features that make it as useful for complex application development as it is for scripting or "glue code" that connects components together.

Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python's support of modules and packages facilitates modular programs and reuse of code.

Python Use Cases

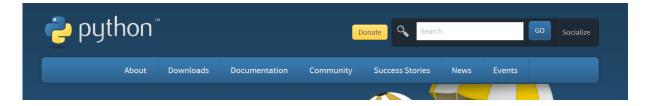
- Creating web applications on a server
- Building workflows that can be used in conjunction with software
- Developing production-ready software
- Performing complex mathematics
- Reading and modifying files
- Connecting to database systems
- Fast prototyping

Task: Install Python in your respective OS, and check the version.

You can install Python in your System whether it is window, MacOS, ubuntu, centos etc. Below are the links for the installation:

Installing python on Windows 11

Step 1: Go to this website https://www.python.org/downloads/



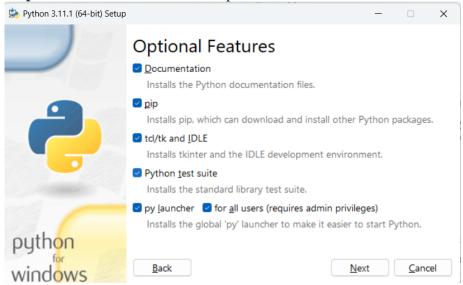
Step 2: Click on downloads option in main bar



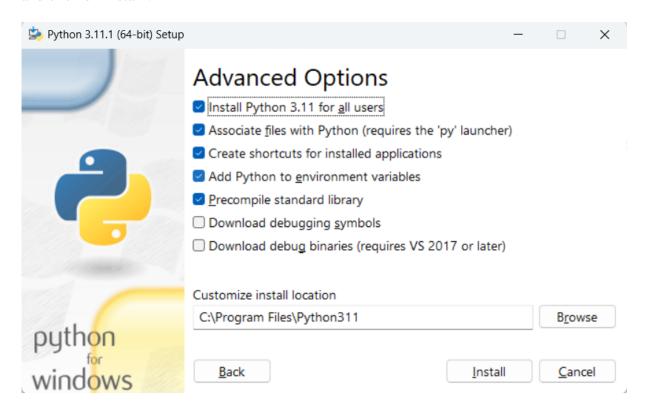
Step 3 : Check the all checkbox on window that asks Add gython.exe to path & click customize installation.



Step 4: Select all checkboxes in optional Feature window



Step 5 : Select first 5 checkboxes in Advance option window then give install location and click on Install .



Step 6 : Open Command prompt from search bar in your laptop to cheek the Python version with command : **python -- version**

```
C:\Users\omipa>python --version
Python 3.11.1
C:\Users\omipa>
```

Step 7: Try running simple script on python:

```
C:\Users\omipa>py
Python 3.11.1 (tags/v3.11.1:a7a450f, Dec 6 2022, 19:58:39) [MS
C v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more infor mation.
>>> |
```

Finally Downloaded Python 3.11.1 on Windows 11 successfully.