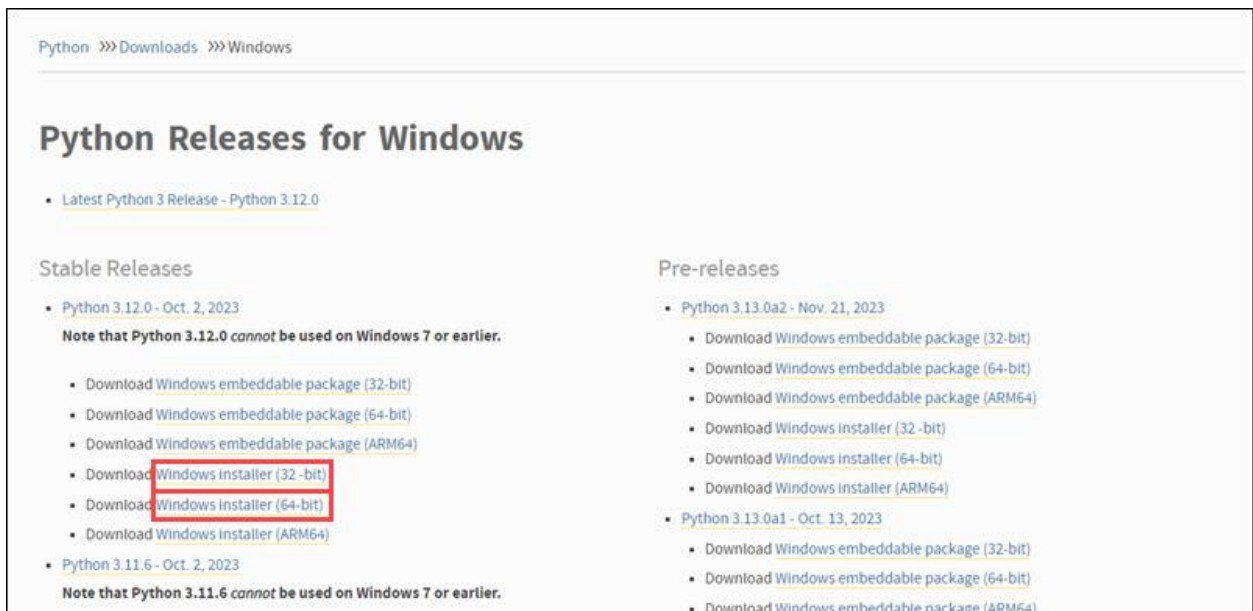


# Practical-1

**(A) Introduction to Python Programming. Installation & Configuration of Python. Along with its all-major editors, IDLE, Pycharm, Anaconda, Jupyter, Interpreter etc.**

**Ans:**

**Step-1:** Select Python version and install it in your windows.



The screenshot shows the 'Python Releases for Windows' page from the official Python website. The breadcrumb trail at the top reads 'Python >>> Downloads >>> Windows'. The main heading is 'Python Releases for Windows'. Below this, there is a link to the 'Latest Python 3 Release - Python 3.12.0'. The page is divided into two columns: 'Stable Releases' and 'Pre-releases'. Under 'Stable Releases', the first entry is 'Python 3.12.0 - Oct. 2, 2023', followed by a note: 'Note that Python 3.12.0 cannot be used on Windows 7 or earlier.' Below the note are five download links: 'Download Windows embeddable package (32-bit)', 'Download Windows embeddable package (64-bit)', 'Download Windows embeddable package (ARM64)', 'Download Windows installer (32-bit)', and 'Download Windows installer (64-bit)'. The 'Download Windows installer (64-bit)' link is highlighted with a red box. The second entry under 'Stable Releases' is 'Python 3.11.6 - Oct. 2, 2023', followed by a note: 'Note that Python 3.11.6 cannot be used on Windows 7 or earlier.' Under 'Pre-releases', the first entry is 'Python 3.13.0a2 - Nov. 21, 2023', followed by four download links: 'Download Windows embeddable package (32-bit)', 'Download Windows embeddable package (64-bit)', 'Download Windows embeddable package (ARM64)', 'Download Windows installer (32-bit)', 'Download Windows installer (64-bit)', and 'Download Windows installer (ARM64)'. The second entry under 'Pre-releases' is 'Python 3.13.0a1 - Oct. 13, 2023', followed by three download links: 'Download Windows embeddable package (32-bit)', 'Download Windows embeddable package (64-bit)', and 'Download Windows embeddable package (ARM64)'.

Python >>> Downloads >>> Windows

## Python Releases for Windows

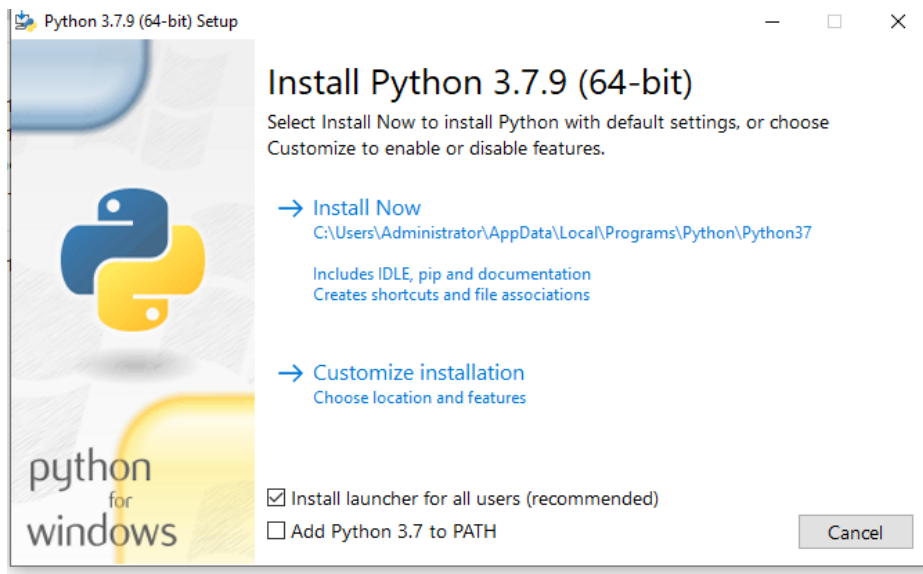
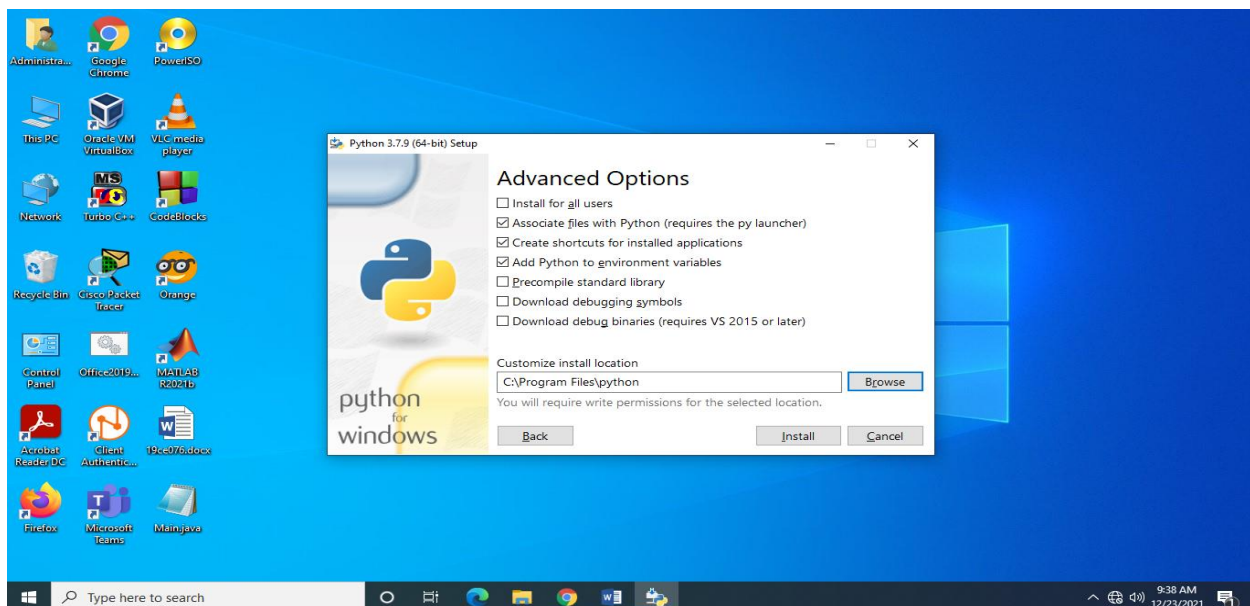
- [Latest Python 3 Release - Python 3.12.0](#)

### Stable Releases

- [Python 3.12.0 - Oct. 2, 2023](#)  
**Note that Python 3.12.0 cannot be used on Windows 7 or earlier.**
  - [Download Windows embeddable package \(32-bit\)](#)
  - [Download Windows embeddable package \(64-bit\)](#)
  - [Download Windows embeddable package \(ARM64\)](#)
  - [Download Windows installer \(32-bit\)](#)
  - [Download Windows installer \(64-bit\)](#)
  - [Download Windows installer \(ARM64\)](#)
- [Python 3.11.6 - Oct. 2, 2023](#)  
**Note that Python 3.11.6 cannot be used on Windows 7 or earlier.**

### Pre-releases

- [Python 3.13.0a2 - Nov. 21, 2023](#)
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  - [Download Windows embeddable package \(32-bit\)](#)
  - [Download Windows embeddable package \(64-bit\)](#)
  - [Download Windows embeddable package \(ARM64\)](#)

**Step-2: Run Executable Installer.****Step-3: Choose Optional Installation Features.**

**Step-4:** Verify Python was installed in your windows.

```
C:\Users\PC>python --version
Python 3.12.0
```

**Step-5:** Verify PIP was installed.

```
C:\Users\PC>pip --version
pip 23.2.1 from C:\Users\PC\AppData\Local\Programs\Python\Python312\Lib\site-packages\pip (python 3.12)
```

**Step-6:** Install Virtual Environment.

```
C:\Users\PC>pip install virtualenv
Collecting virtualenv
  Downloading virtualenv-20.25.0-py3-none-any.whl.metadata (4.5 kB)
Collecting distlib<1,>=0.3.7 (from virtualenv)
  Downloading distlib-0.3.7-py2.py3-none-any.whl.metadata (5.1 kB)
Collecting filelock<4,>=3.12.2 (from virtualenv)
  Downloading filelock-3.13.1-py3-none-any.whl.metadata (2.8 kB)
Collecting platformdirs<5,>=3.9.1 (from virtualenv)
  Downloading platformdirs-4.0.0-py3-none-any.whl.metadata (11 kB)
Downloading virtualenv-20.25.0-py3-none-any.whl (3.8 MB)
----- 3.8/3.8 MB 7.8 MB/s eta 0:00:00
Downloading distlib-0.3.7-py2.py3-none-any.whl (468 kB)
----- 468.9/468.9 kB 14.8 MB/s eta 0:00:00
Downloading filelock-3.13.1-py3-none-any.whl (11 kB)
Downloading platformdirs-4.0.0-py3-none-any.whl (17 kB)
Installing collected packages: distlib, platformdirs, filelock, virtualenv
Successfully installed distlib-0.3.7 filelock-3.13.1 platformdirs-4.0.0 virtualenv-20.25.0
```

**Step-7:** Python is now installed and now it is available to be used.