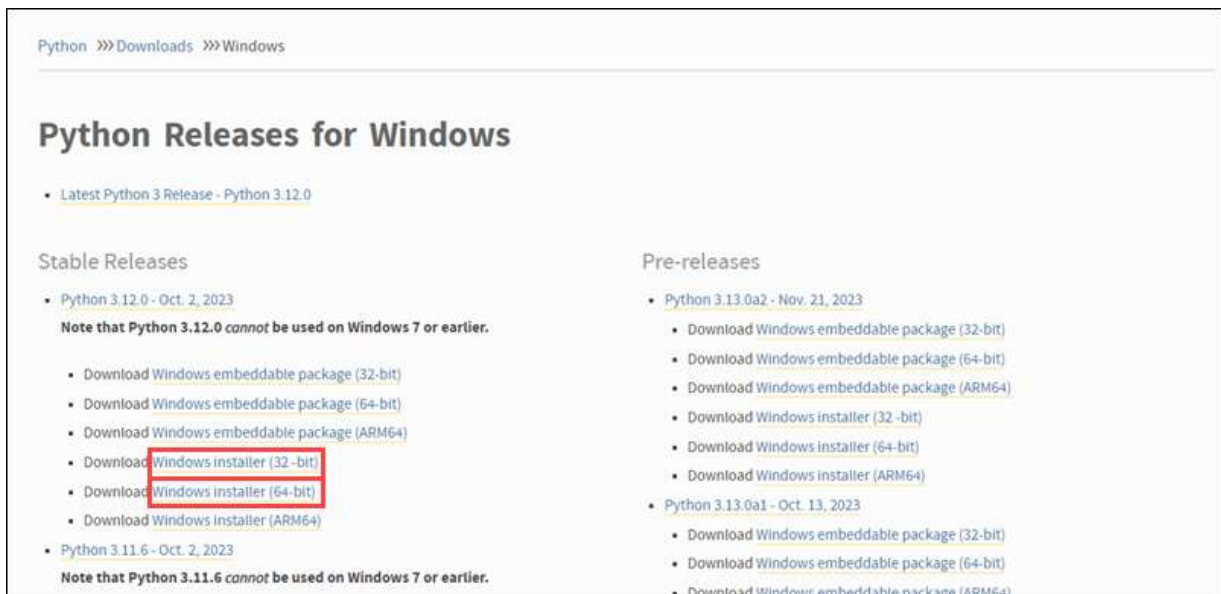


Practical-1

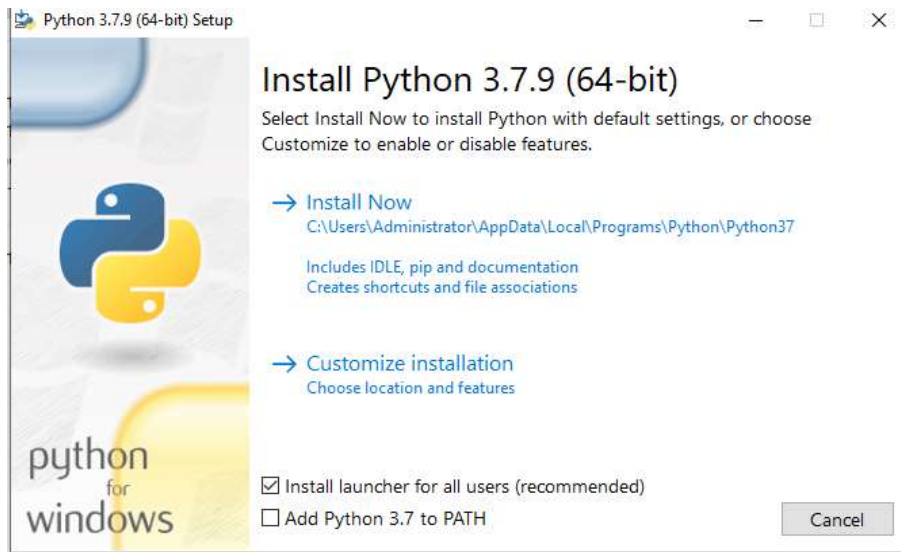
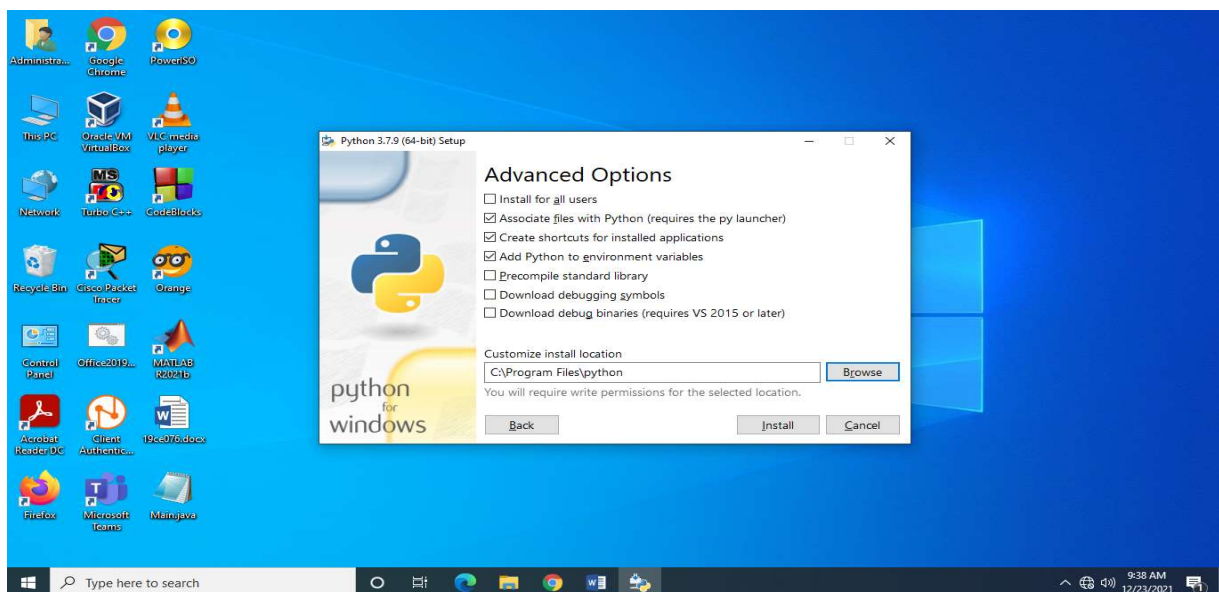
(A) Introduction to Python Programming. Installation & Configuration of Python. Along with its all-major editors, IDLE, Pycharm, Anaconda, Jupyter, Interpreter etc.

Ans:

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



The screenshot shows the 'Python Releases for Windows' page. The breadcrumb trail at the top reads 'Python >>> Downloads >>> Windows'. The main heading is 'Python Releases for Windows'. Below it, a link points 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 this note are five 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 (32-bit)' link is highlighted with a red box. Below these links is another entry: '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 links: 'Download Windows embeddable package (32-bit)', 'Download Windows embeddable package (64-bit)', 'Download Windows embeddable package (ARM64)', and 'Download Windows installer (32-bit)'. Below these links are two more entries: 'Python 3.13.0a1 - Oct. 13, 2023', followed by three links: 'Download Windows embeddable package (32-bit)', 'Download Windows embeddable package (64-bit)', and '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.