Rising Waters: A Machine Learning Approach to Flood Prediction

DATE	28-02-2026
TEAM ID	LTVIP2026TMIDS89043
PROJECT NAME	Rising Waters: A Machine Learning Approach to Flood Prediction
MAXIMUM MARKS	2 MARKS

CHAPTER-6

6.1 PRE-REQUISITES:

To complete this project, we require the following software's, and packages.

- Anaconda Navigator
- PyCharm
- Python

ANAKONDA NAVIGATER:

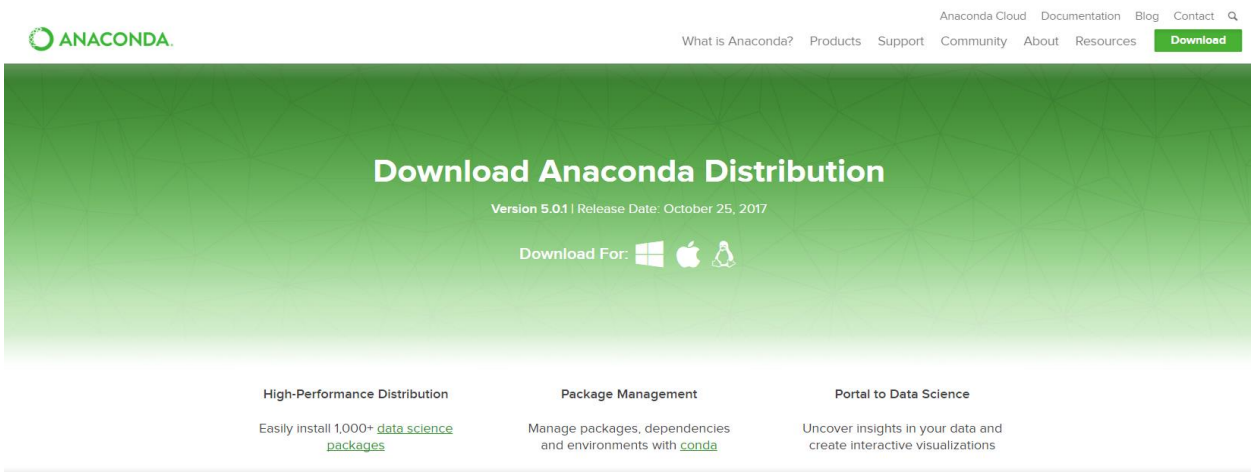
How to Install Anaconda on Windows:

Anaconda is a popular open-source distribution of Python and R and is widely used in the field of data science, machine learning and scientific computing. It contains Jupyter, Sypder, etc. that are well capable of handling a large number of data sets and processes as per user's need. It helps in simplifying package management and deployment, which promotes a robust environment for various data-related tasks.

Step 1: Visit the Official Website:

Download Anaconda from https://www.anaconda.com .

Make sure to download the "Python 3.13.1 Version".



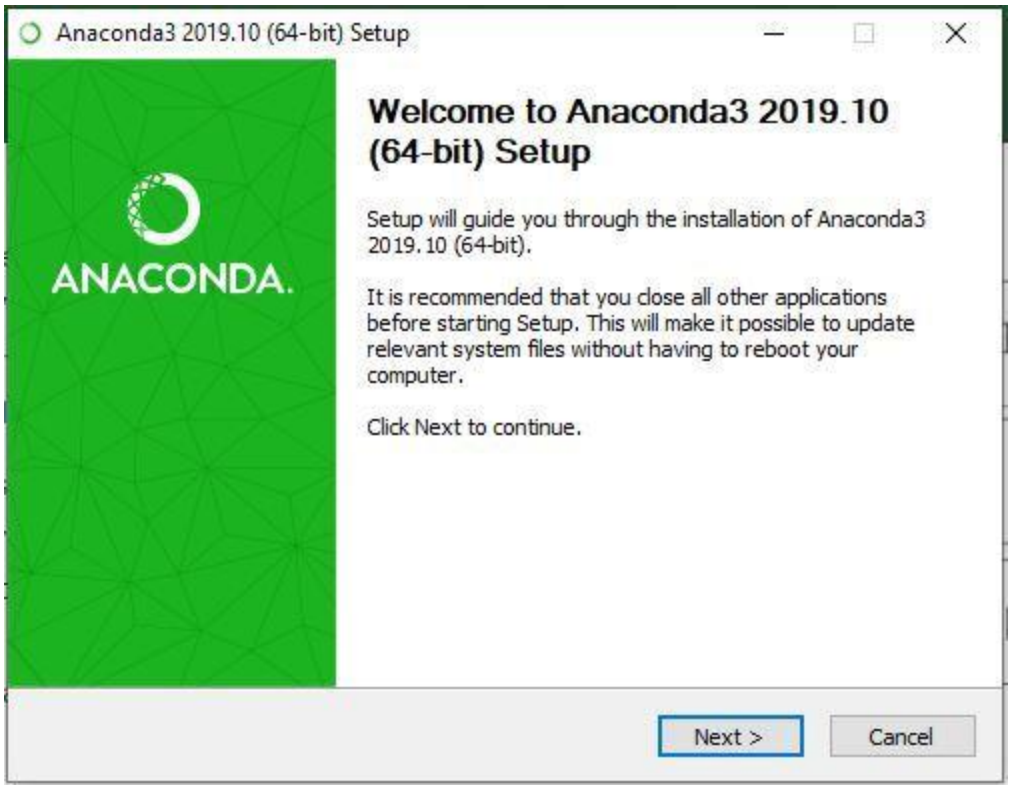
Step 2: Select the Windows Installer.

- Click on the Download button.

- Under the operating system options, select Windows.
- Choose Windows Installer (64-bit) .
- Download the .exe installer file.
- Select the location where you want to save the file and click **"Save"** to start the downloading process.

Step3: Run the Anaconda Installer

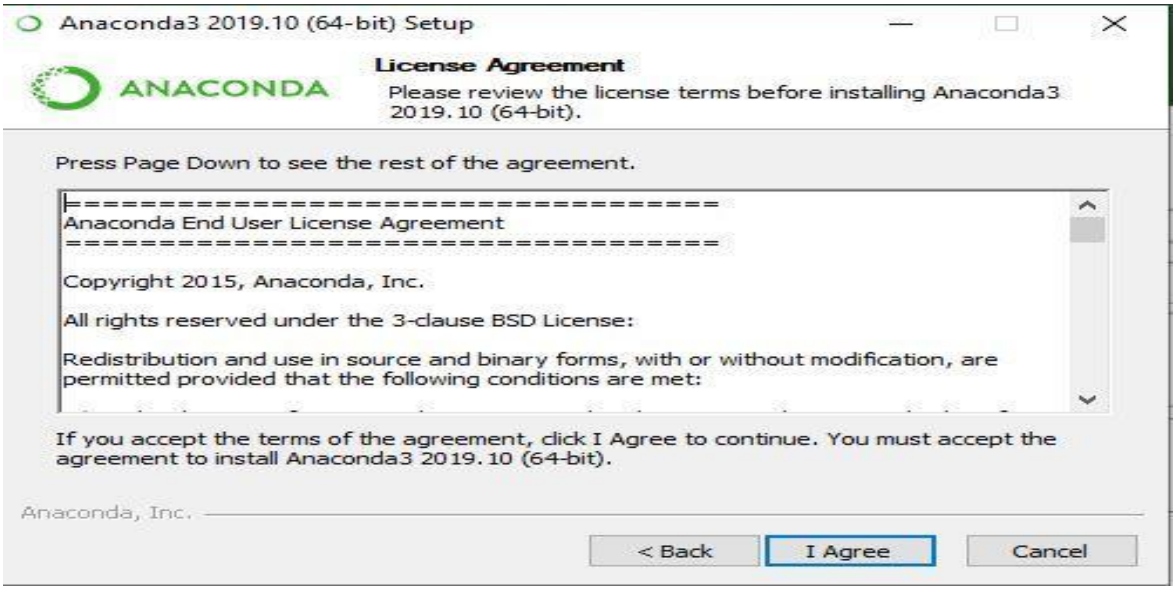
Once the installation is completed, now we will see how to setup Ananconda Installer in Windows .Begin with the installation process.



Step 4: Getting through the License Agreement :

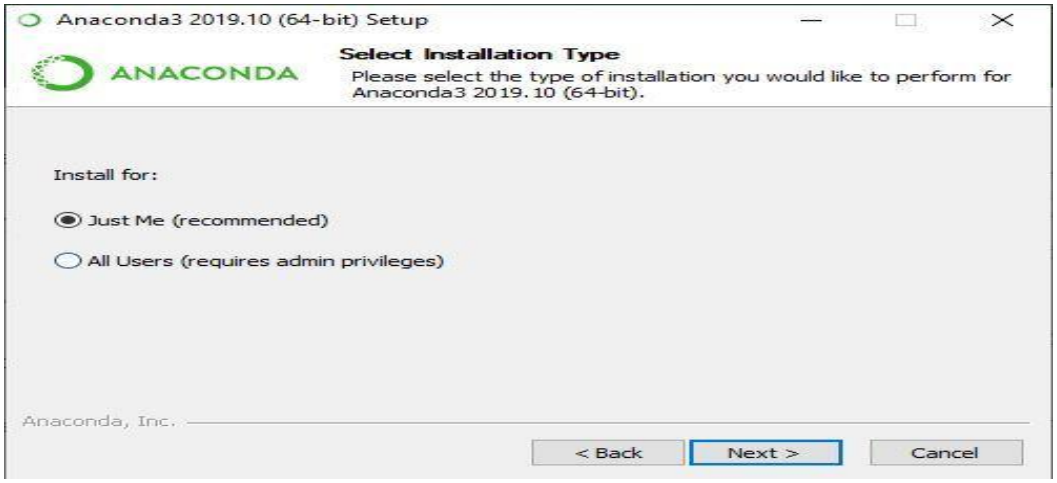
Follow the on-screen instructions, read the license terms & agreement and proceed ahead.

- Click on the **"I Agree"** button to accept the terms.
- The installation process will continue to the next setup window.



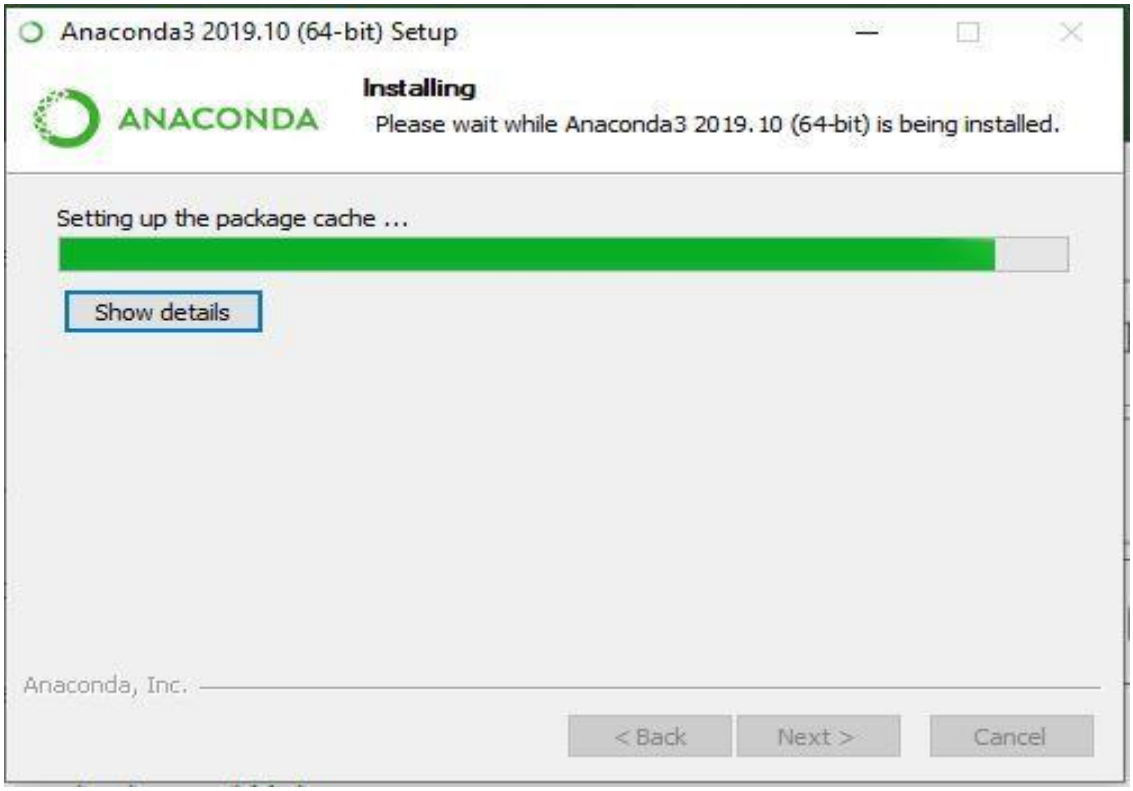
Step 5: Select Installation Type :

Select Just Me if you want the software to be used by a single User else you can select All Users.



Step 6: Getting through the Installation Process :

- Select the path where you wish to install the file extractor.
- lick "Next" to proceed .
- Click Install to start the Anaconda Installation process.



Step 7: Finishing up the Installation:

Once the installation gets complete, click Finish to complete the process.

PYCHARM

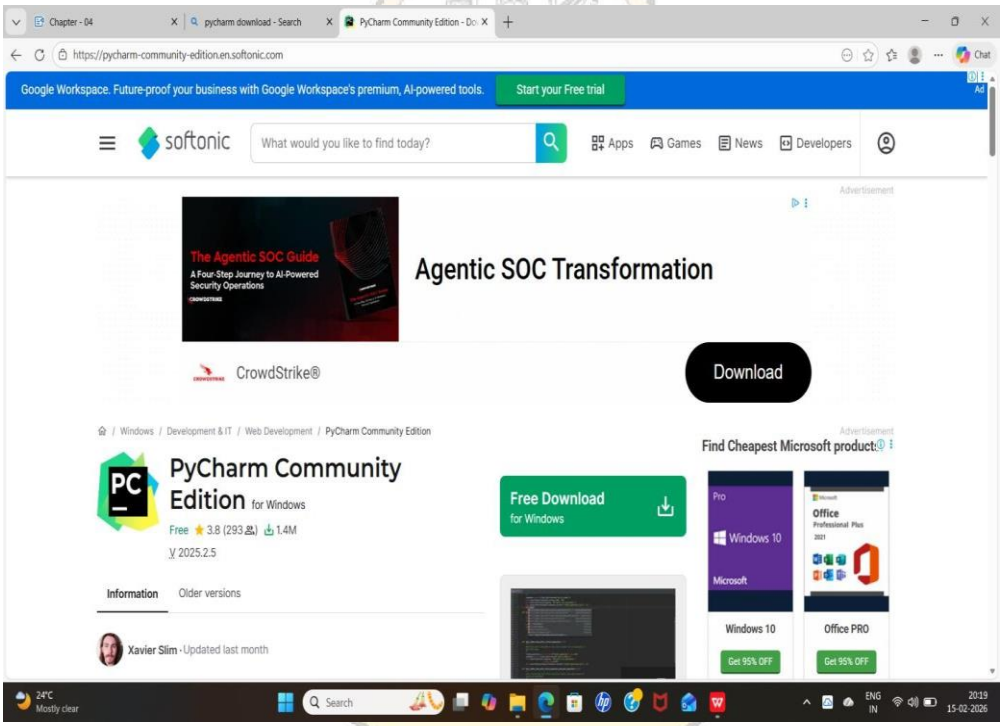
Installing PyCharm on Windows:

1. Go to the JetBrains PyCharm website

- Open any web browser (Chrome, Edge, Firefox, etc.).
- Type pycharm.jetbrains.com in the address bar and press Enter.

2. Click Download

- On the PyCharm homepage, you'll see a Download button.
- Click it to go to the download page.



3. Choose Community or Professional

You will see two versions of PyCharm:

PyCharm Community Edition (Free)

Choose this if:

- You are a beginner or student
- You are learning basic Python
- You are doing school projects, scripting, or simple programs

What it includes:

- Python editor
- Code suggestions (auto-complete)
- Debugger
- Basic project tools

4. Download the Windows (.exe) installer

- Under your chosen version, click Download for Windows.
- A file ending in .exe will start downloading.
- Wait for the download to complete.

HOW TO INSTALL THE PACKAGES :

To install the packages , open pycharm

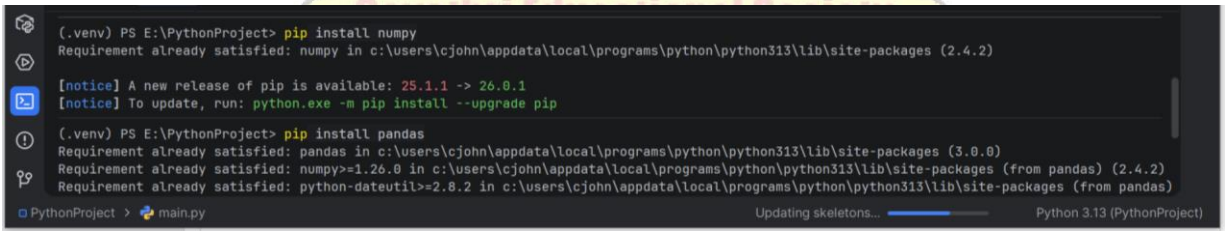
Step-1: click on Terminal .

Step-2: Now, Run the package command one by one and they will start installing in the interpreter

Python packages:

Open anaconda prompt as administrator

Type "pip install numpy" and click enter:



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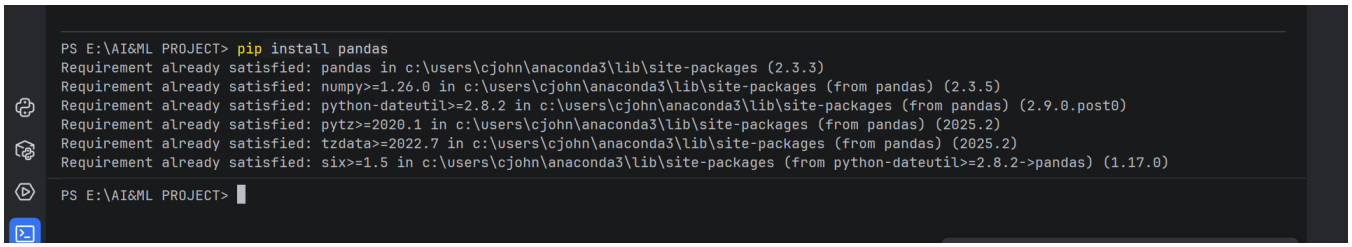
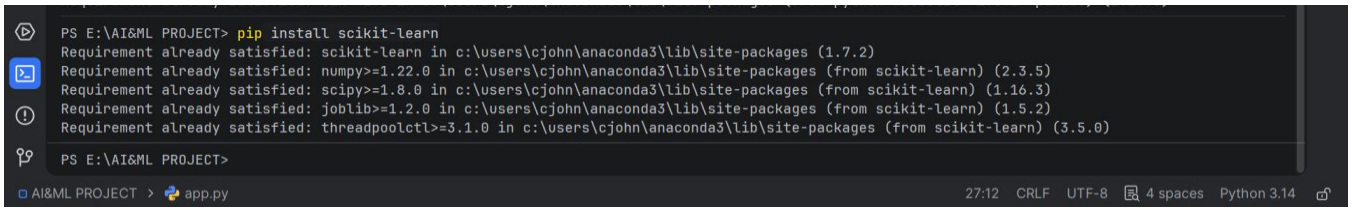
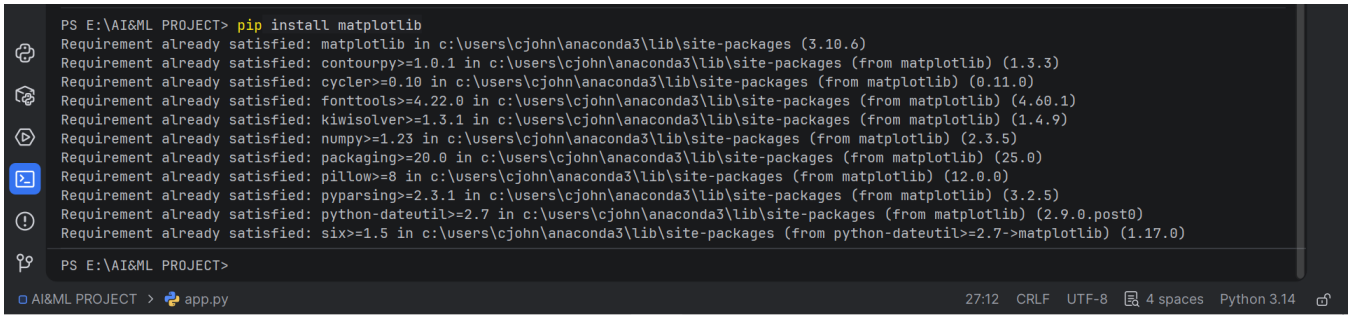
Type “pip install pandas” and click enter.



Type “pip install scikit-learn” and click enter.

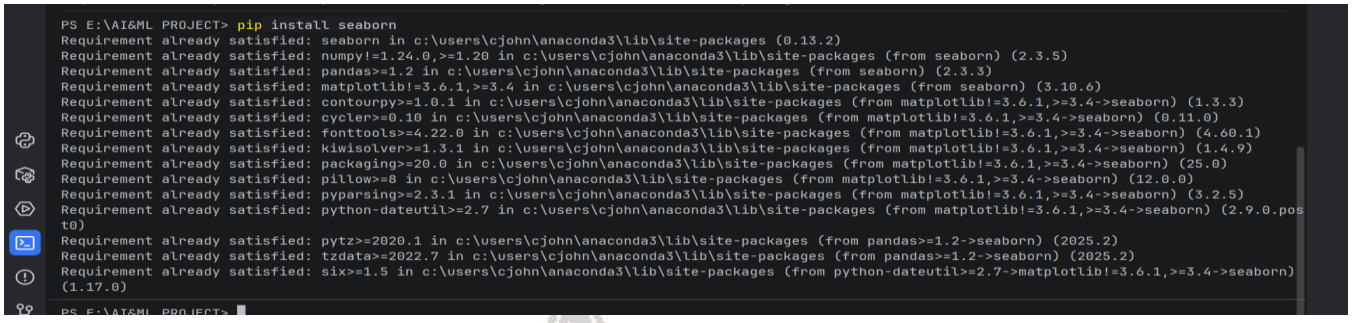


Type ”pip install matplotlib” and click enter.



Type ”pip install pickle-mixin” and enter.

Type ”pip install seaborn” and enter.



Type “pip install Flask” and enter: