Pre-Requisites

Date	18 November 2022
Team ID	PNT2022TMID49528
Project Name	Efficient water quality analysis and prediction using mechine learning

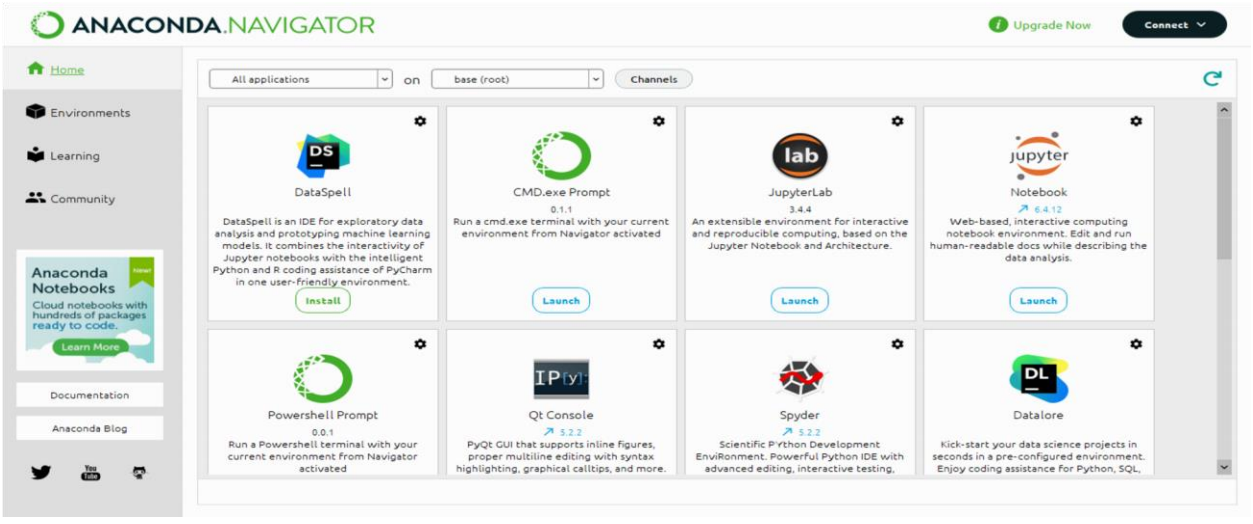
Step 1:

Anaconda Navigator

Anaconda Navigator is a free and open-source distribution of the Python and R programming languages for data science and machine learning-related applications. It can be installed on Windows, Linux, and macOS. Conda is an open-source, cross-platform, package management system. Anaconda comes with great tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code.

For this project, we will be using a Jupyter notebook and Spyder **Anaconda**

Navigator

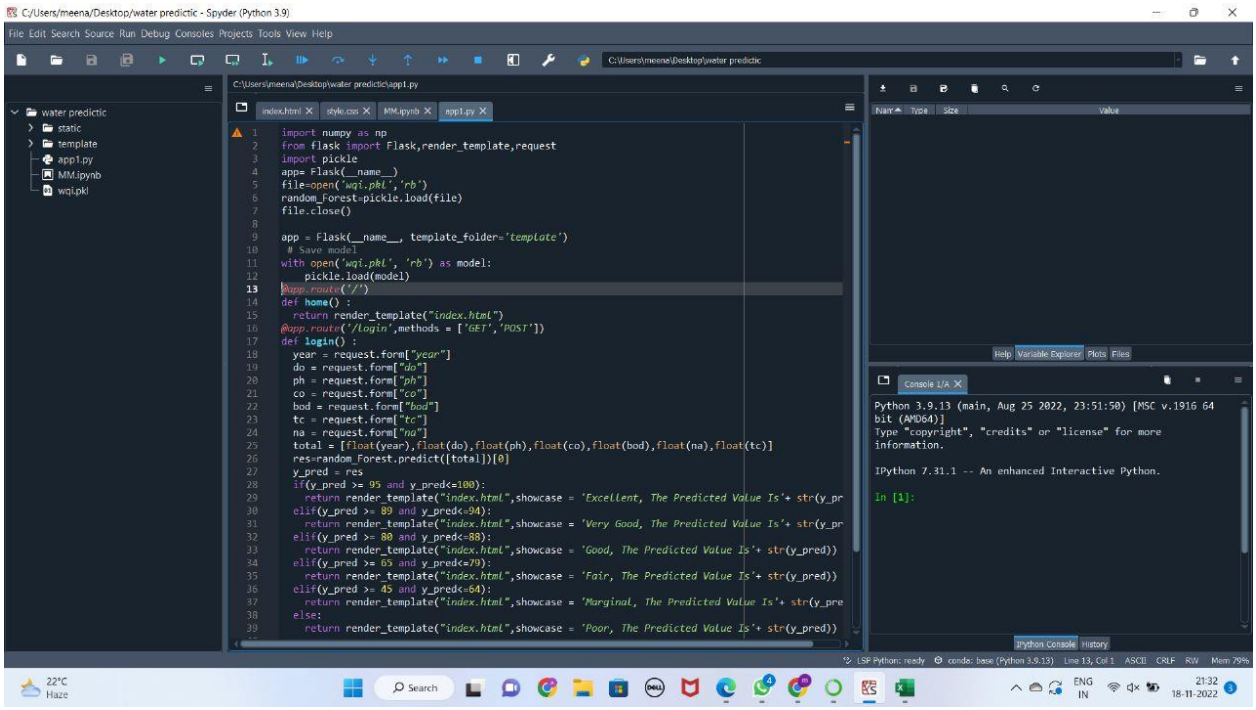


Anaconda Prompt

SPYDER INITIALIZATION

Step 2: Python packages

To build Machine learning models you must require the following packages



- **Sklearn:** Scikit-learn is a library in Python that provides many unsupervised and supervised learning algorithms.
- **NumPy:** NumPy is a Python package that stands for 'Numerical Python. It is the core library for scientific computing, which contains a powerful n-dimensional array of object
- **Pandas:** pandas is a fast, powerful, flexible, and easy-to-use open-source data analysis and manipulation tool, built on top of the Python programming language.
- **Matplotlib**: It provides an object-oriented API for embedding plots into applications using general-purpose GUI toolkits

Step 3:

Flask - Web framework used for building Web applications.