# PREREQUISITES

**TEAM ID :** PNT2022TMID04956

**TITLE** : PREDICTING THE ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION

**In order to develop this project we need to install the following software/packages:**

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

**Step 2:**

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 objects.

**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

**Flask:** Web framework used for building Web applications.

If you are using anaconda navigator, follow the below steps to download the required packages:

1. Open anaconda prompt.
2. Type**"pip install numpy"** and click enter.
3. Type **"pip install pandas"**and click enter.
4. Type**"pip install matplotlib"** and click enter.
5. Type **"pip install scikit-learn"**and click enter.
6. Type**"pip install Flask"** and click enter.

If you are using Pycharm IDE, you can install the packages through the command prompt and follow the same syntax as above.