

# Prerequisites

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

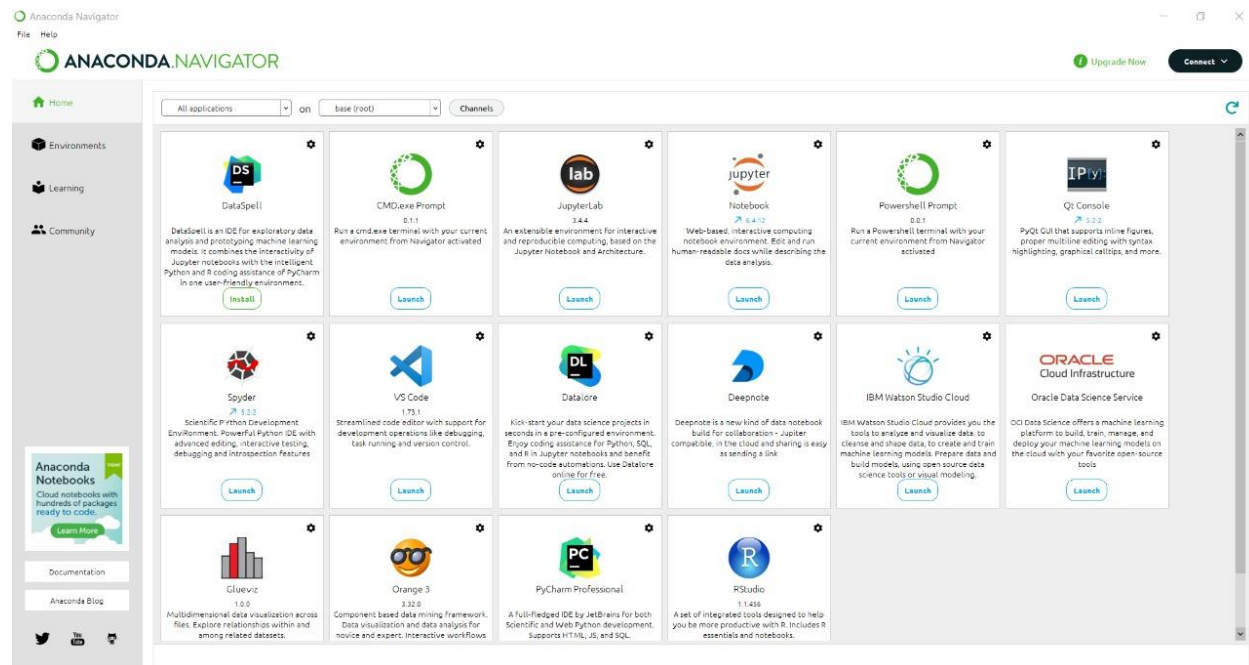
## Step 1:

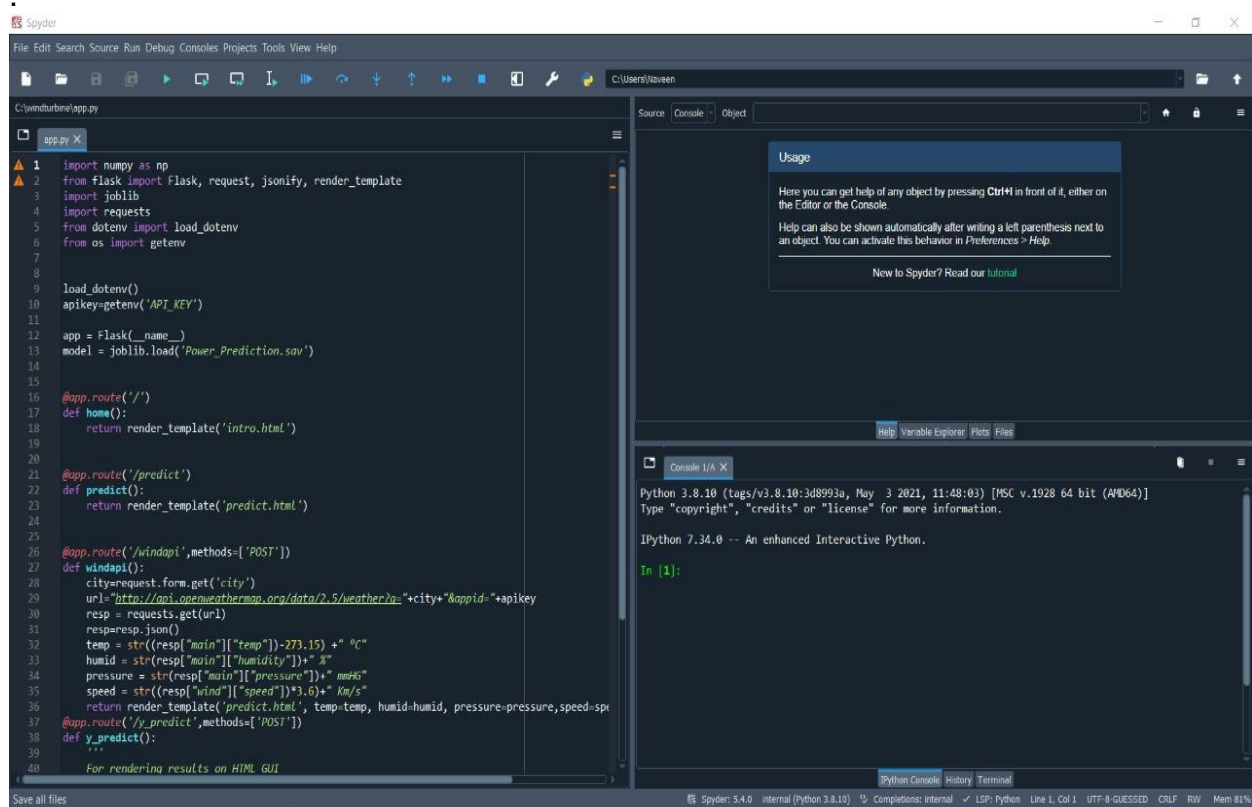
### Anaconda Navigator and Spyder

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 Jupyter notebook and Spyder

To install Anaconda navigator and to know how to use Jupyter Notebook & Spyder using Anaconda watch the video





## 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 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

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

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Waveen> cd ../..
PS C:\> cd .\windturbine\
PS C:\windturbine> pipenv shell
Loading .env environment variables...
Loading .env environment variables...
Launching subshell in virtual environment...
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\windturbine> python app.py
C:\Users\Waveen\virtualenvs\windturbine-78F8MyY\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator DecisionTreeRegressor from version 1.0.2 when using version 1.1.3. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
C:\Users\Waveen\virtualenvs\windturbine-78F8MyY\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator RandomForestRegressor from version 1.0.2 when using version 1.1.3. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
 * Serving Flask app "app"
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
```