

# PREREQUISITES

**TEAM ID : PNT2022TMID20805**

**PROJECT NAME : A Novel Method for Handwritten Digit Recognition System**

**TEAM LEADER : Naveen Kumar P**

**TEAM MEMBER : Dev Vinoth S, Prawin Kumar T, Pradesh K**

**To complete this project you should have the following software and packages**

## **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 so very nice tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. For this project, we will be using Jupiter notebook and spyder

For this project, we will be using a Jupyter notebook and Spyder To install the Anaconda navigator and to know how to use Jupyter Notebook & Spyder using Anaconda If you are using anaconda navigator, follow the below steps to download the required packages: Flask - Web framework used for building Web applications. Open anaconda prompt as administrator If you are using Pycharm IDE, you can install the packages through the command prompt and follow the same syntax as above.

Web framework used for building Web applications Python packages:

- open anaconda prompt as administrator
- Type “pip install numpy” and click enter.
- Type “pip install pandas” and click enter.

- Type “pip install scikit-learn” and click enter.
- Type “pip install tensorflow==2.3.0” and click enter.
- Type “pip install keras==2.4.0” and click enter.
- Type “pip install Flask” and click enter.
- Deep Learning Concepts .

Artificial Neural Networks Artificial neural network (ANN) is a computational model that consists of several processing elements that receive inputs and deliver outputs based on their predefined activation functions.