



# Oasis Info Bytes : Data Science Internship

## Iris flower classification using KNN classifier

**Description:** The aim of this project is to develop a classifier that differentiates and predict the three classes of Iris flower. They include **Iris Setosa**, **Iris Versicolor** and **Iris Virginica**. With the help of the data set that defines the features like petal length, sepal length, petal width, sepal width we need to classify the flower species. For that I have used K Nearest Neighbor Classification algorithm under supervised learning.

**Dataset :** [irisdataset](#)

### Key Features:

- **Dataset :** Collecting the required dataset is a crucial initial step in any data analysis project. For my project, I utilized a dataset from Kaggle to ensure comprehensive and high-quality data.
- **Visualizing :** To clearly understand complex data, visualization techniques are incredibly helpful. Therefore, we employed the Matplotlib library to effectively visualize the dataset and uncover insightful patterns and trends.
- **Feature Extraction :** Feature extraction involves identifying dependent and independent variable x and y. Here the independent variables are petal length, petal width, sepal length and sepal width and the dependent variable is flower species
- **Model Implementation:** Implement the model using KNN classifier from the library sklearn

- **Model Training :** Split the data into training and testing data. Training data(80%) is used to train the model. Test data(20%) is used to evaluate the accuracy of the trained model