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# *Classification of Flowers using K Nearest Neighbours*

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## **Introduction:**

The K nearest Neighbours is a classification algorithm that operates on a very simple principle but has a wide use for classification problems. It classes data points into the same category based on feature similarity.

This project aims to predict what species a flower is based on its sepal/petal length and width.

## **Architecture:**

The algorithm builds the data point graph as it searches for the class of each test point. It searches for the closest neighbours by calculating the distance of the test point from every other point in the training data (/graph). The algorithm then takes the k smallest distances, finds the points those distances belong to and calculates the probability of each class within those k points.

## **Conclusion:**

This project exhibits how flexible the K Nearest Neighbours algorithm can be due to its simple design and implementation.