**CASE STUDY: IRIS PLANT CLASSIFICATION USING K-NEAREST NEIGHBORS**

K nearest neighbors is a simple algorithm that stores all available cases and classifies new cases based on a similarity measure (e.g., distance functions). A case is classified by a majority vote of its neighbors, with the case being assigned to the class most common amongst its K nearest neighbors measured by a distance function. If K = 1, then the case is simply assigned to the class of its nearest neighbor. More information at: <https://bit.ly/2GLAhe9>

## PROBLEM STATEMENT:

The data set contains 3 classes of 50 instances each, where each class refers to a type of iris plant. The attribute to be predicted is the class of iris plant. The classes are as follows: 1. Iris Setosa, 2. Iris Versicolour, 3. Iris Virginica

There are 4 features:

sepalLength: sepal length in cm

sepalWidth: sepal width in cm

petalLength: petal length in cm

petalWidth: petal width in cm

There are 3 classes representing class label of iris flower {1,2,3}.

Iris Setosa

Iris Versicolour

Iris Virginica

## Steps Involved:

Data set used is ‘Iris.csv’

1. IMPORTING DATA
2. EXPLORING THE DATASET
3. DATA CLEANING
4. TRAINING THE MODEL
5. EVALUATING THE MODEL

# EXCELLENT JOB! NOW YOU BECAME EXPERT IN K-NEAREST NEIGHBORS, KEEP UP THE GOOD WORK!