

In [6]:

```
import pandas as pd
import numpy as np

iris = pd.read_csv('G:\Dattathreya\PROJECT\DATA SETS\IRIS.csv')

# splitting the dataset
x = iris.drop("species", axis=1)
y = iris["species"]
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x, y, test_size=0.2, random_state=0)

# training the model
from sklearn.neighbors import KNeighborsClassifier
mml = KNeighborsClassifier(n_neighbors=1)
mml.fit(x_train, y_train)

# giving inputs to the machine Learning model
# features = [[sepal_length, sepal_width, petal_length, petal_width]]
features = np.array([[5, 2.9, 1, 0.2]])

# using inputs to predict the output
prediction = mml.predict(features)
print("Prediction: {}".format(prediction))
```

Prediction: ['Iris-setosa']

C:\Users\HIMAVANTH\anaconda3\lib\site-packages\sklearn\base.py:450: UserWarning: X does not have valid feature names, but KNeighborsClassifier was fitted with feature names

warnings.warn(
C:\Users\HIMAVANTH\anaconda3\lib\site-packages\sklearn\neighbors_classification.py:228: FutureWarning: Unlike other reduction functions (e.g. `skew`, `kurtosis`), the default behavior of `mode` typically preserves the axis it acts along. In SciPy 1.11.0, this behavior will change: the default value of `keepdims` will become False, the `axis` over which the statistic is taken will be eliminated, and the value None will no longer be accepted. Set `keepdims` to True or False to avoid this warning.

mode, _ = stats.mode(_y[neigh_ind, k], axis=1)

So this is how you can give inputs to a model to calculate the predicted value based on the input values.