

```
In [16]: from sklearn.model_selection import train_test_split
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import classification_report, confusion_matrix
from sklearn import datasets

iris=datasets.load_iris()

x = iris.data
y = iris.target

for i in range(len(iris.target_names)):
    print(" Label ",i," : ",iris.target_names[i])

x_train, x_test, y_train, y_test = train_test_split(x,y,test_size=0.1)

#To Training the model and Nearest nighbors K=5
classifier = KNeighborsClassifier(n_neighbors=5)
classifier.fit(x_train, y_train)

#To make predictions on our test data
y_pred=classifier.predict(x_test)

for i in range(len(y_test)):
    print("Actual Class : {0} \tPredicted Class : {1}".format(y_test[i],y_pred[i]))

print('Classification Accuracy : ',classifier.score(x_test,y_test))
```

Label 0 : setosa
Label 1 : versicolor
Label 2 : virginica

Actual Class : 0	Predicted Class : 0
Actual Class : 0	Predicted Class : 0
Actual Class : 0	Predicted Class : 0
Actual Class : 2	Predicted Class : 2
Actual Class : 0	Predicted Class : 0
Actual Class : 1	Predicted Class : 1
Actual Class : 2	Predicted Class : 2
Actual Class : 1	Predicted Class : 1
Actual Class : 1	Predicted Class : 1
Actual Class : 0	Predicted Class : 0
Actual Class : 1	Predicted Class : 1
Actual Class : 2	Predicted Class : 2
Actual Class : 2	Predicted Class : 2
Actual Class : 2	Predicted Class : 2
Actual Class : 1	Predicted Class : 1

Classification Accuracy : 1.0