

```
In [1]: 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
```

```
In [2]: iris=datasets.load_iris()
        iris_data=iris.data
        iris_labels=iris.target
        x_train,x_test,y_train,y_test=train_test_split(iris_data,iris_labels,
        test_size=0.30)

        clf=KNeighborsClassifier(n_neighbors=5)
        clf.fit(x_train,y_train)
        y_pred=clf.predict(x_test)
        print('Confusion matrix is as follows')
        print(confusion_matrix(y_test,y_pred))
        print('Accuracy Matrics')
        print(classification_report(y_test,y_pred))
```

Confusion matrix is as follows

```
[[19  0  0]
 [ 0 14  1]
 [ 0  0 11]]
```

Accuracy Matrics

| | precision | recall | f1-score | support |
|-------------|-----------|--------|----------|---------|
| 0 | 1.00 | 1.00 | 1.00 | 19 |
| 1 | 1.00 | 0.93 | 0.97 | 15 |
| 2 | 0.92 | 1.00 | 0.96 | 11 |
| avg / total | 0.98 | 0.98 | 0.98 | 45 |

In []:

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