

## 4 Results Section

### Evaluation for KNN

#### Accuracy evaluation for KNN

In multilabel classification, accuracy classification score is a function that computes subset accuracy.

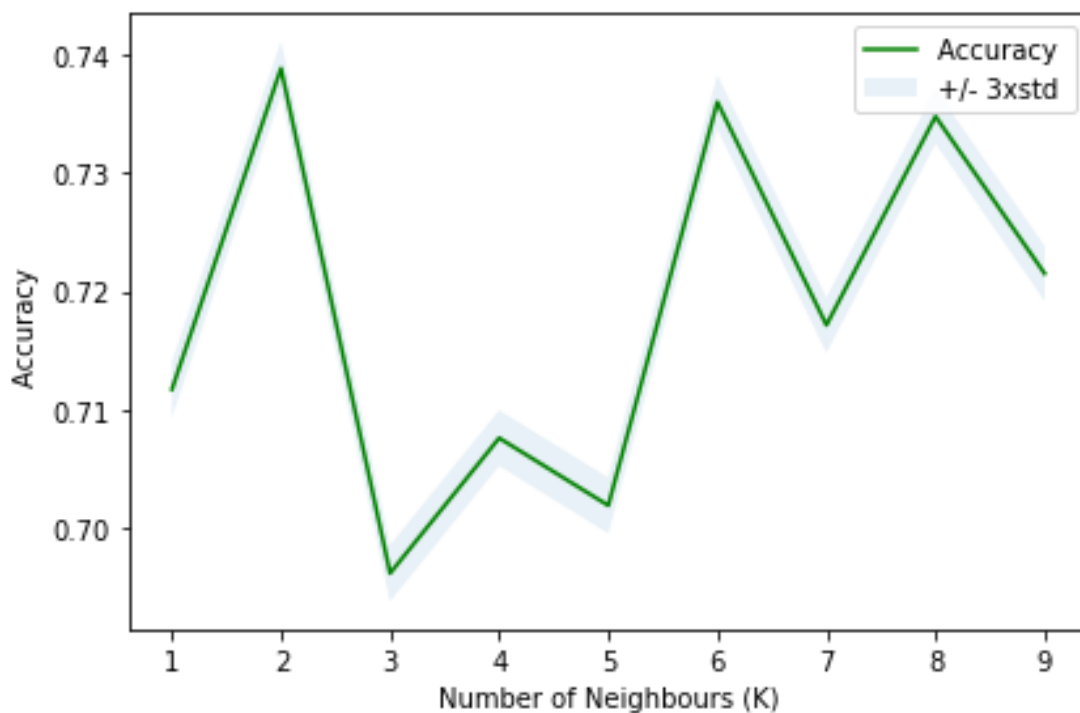
This function is equal to the `jaccard_similarity_score` function.

Essentially, it calculates how closely the actual labels and predicted labels are matched in the test set.

```
print("Train set Accuracy: ", metrics.accuracy_score(y_train,  
neigh.predict(X_train)))  
print("Test set Accuracy: ", metrics.accuracy_score(y_test, yhat))
```

Train set Accuracy: 0.7127332985627423

Test set Accuracy: 0.707589521495722



```
print( "The best accuracy was with", mean_acc.max(), "with k=",  
mean_acc.argmax()+1)
```

The best accuracy was with 0.7388560261962607 with k= 2

## Evaluation for Decision Tree

```
print("DecisionTrees's Accuracy: ", metrics.accuracy_score(y_dtree_testset,
predTree))
```

DecisionTrees's Accuracy: 0.7446216682511179

So Accuracy for Decision Tree is at 74%

Accuracy classification score computes subset accuracy:  
the set of labels predicted for a sample must exactly match the corresponding  
set of labels in y\_true.

In multilabel classification, the function returns the subset accuracy.

If the entire set of predicted labels for a sample strictly match with the true set  
of labels,  
then the subset accuracy is 1.0; otherwise it is 0.0.

```
### Fig. for decision tree available when prerequisite python libraries installed.
###
```