Assignment Day 27

Q1 K-Nearest Neighbour

After Inference I found Accuracy score for k=1 to be Highest ie acc=0.8913857677902621

*Function Created for Itreation

```
def kneighbhor(x):
    for i in range(1,x):
        knn=neighbors.KNeighborsClassifier(n_neighbors=i)
        b=knn.fit(x_train,y_train).score(x_test,y_test)
        l.append(b)

kneighbhor(251)
```

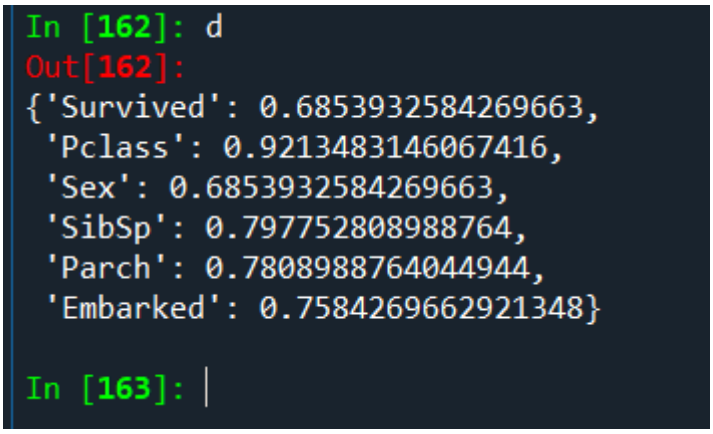
*Max Accuracy found

```
In [102]: keymax=max(d,key=d.get)

In [103]: print(keymax)
1

In [104]: knn=neighbors.KNeighborsClassifier(n_neighbors=1)

In [105]: knn.fit(x_train,y_train).score(x_test,y_test)
Out[105]: 0.8913857677902621

In [106]: import pandas as pd

In [107]: df = pd.DataFrame(data=d, index=[0])

In [108]:
     ...: df = (df.T)

In [109]: print (df)
           0
1   0.891386
2   0.865169
3   0.865169
4   0.823970
5   0.831461
..       ...
246 0.719101
247 0.719101
248 0.719101
249 0.719101
250 0.719101

[250 rows x 1 columns]

In [110]:
     ...: df.to_excel('dict1.xlsx')
```

Result Pdf for KNN =https://github.com/pranitnale/LetsUpgrade-AI-ML/blob/master/Day%2025/KNN.pdf

Support Vector Machine

Result for Svm on dataset



Accuracy for Pclass found to be Highest i.e 0.9213