Final Python File

Listed All The Model

In [35]:

```
!ls
```

```
 Case_Study_Class_Weight_and_Model6.ipynb
 Case_Study_Class_Weight_,Feature_Engineering_and_Model1.ipynb
 Case_Study_Class_Weight+Normalization,Feature_Engineering_and_Model5.ipynb
'Case_Study_Forward_Feature_Selection,Feature_Engineering_and_Model_3 (1).ipynb'
'Case_Study_OverSampling_,Feature_Engineering_and_Model_2 (1).ipynb'
 Case_Study_PseudoTechnique_and_Model7.ipynb
'Case_Study_PseudoTechnique_+Nearest Neighbors + Standardization+Classifiersand_Model4.ipynb'
 drive
 model_pickle
 sample_data
 sample_submission.csv
 test.csv
 train.csv
```

Import Libraries

In [24]:

```
import warnings
warnings.filterwarnings('ignore')
import pandas as pd
import joblib
from sklearn.metrics import  roc_auc_score
```

Import Dataset

In [25]:

```
train = pd.read_csv('train.csv')
test = pd.read_csv('test.csv')
submission = pd.read_csv('sample_submission.csv')
print(train.shape)
print(test.shape)
print(submission.shape)
```

```
(250, 302)
(19750, 301)
(19750, 2)
```

Import Train Test DataSet

In [26]:

```
X = train.drop(['id','target'], axis=1)
y = train['target']
test = test.drop(['id'], axis=1)
print(X.shape, y.shape)
print(test.shape)
```

```
(250, 300) (250,)
(19750, 300)
```

Final Function 1

In [31]:

```python
import pickle
def final_fun_1(X):
  with open('model_pickle','rb') as f:
    mod = pickle.load(f)
  pred = mod.predict_proba(X)[:,1]
  return pred
final_fun_1(test)
```

Out[31]:

```
array([0.66542599, 0.49363699, 0.54808538, ..., 0.34306623, 0.79406723,
       0.22330863])
```

Final Function 2

In [32]:

```python
def final_fun_2(X,Y):
    Y_pred = final_fun_1(X)
    score = roc_auc_score(Y, Y_pred)
    return score
final_fun_2(X,y)
```

Out[32]:

0.9600694444444445