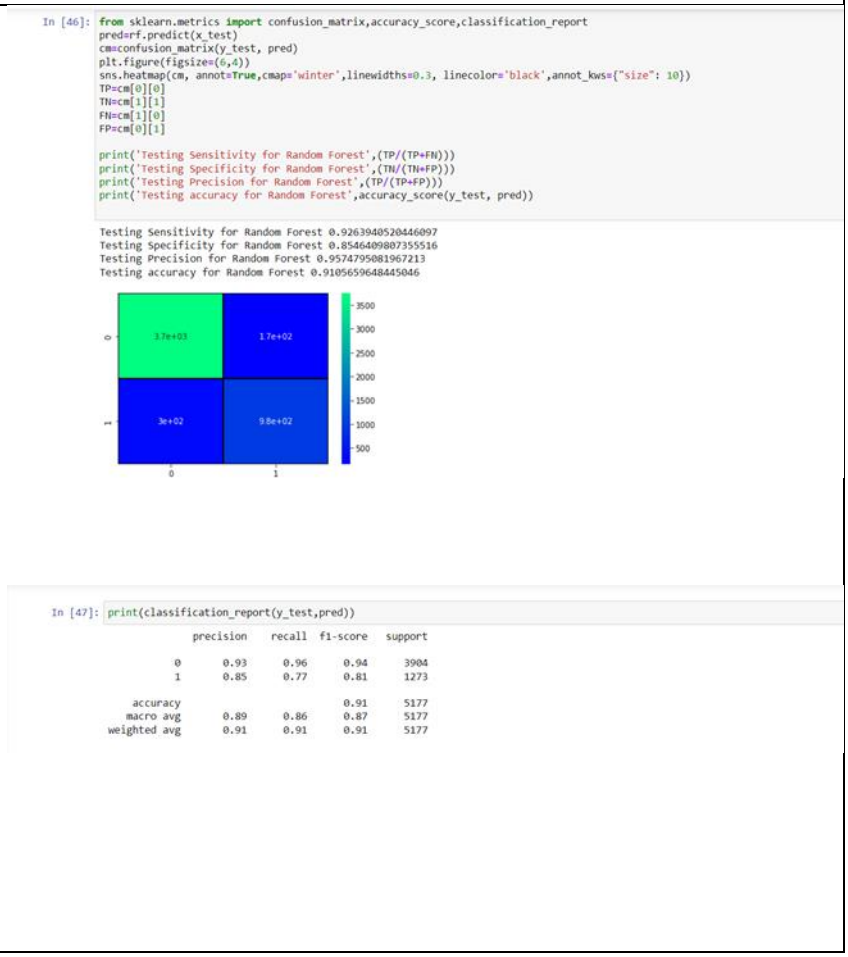
Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID32530
Project Name	Smart Lender-Applicant credibility prediction for loan approval.
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Classification Model:** Confusion Matrix – , Accuray Score- & Classification Report -	

2.	Tune the Model	Hyperparameter Tuning - Validation Method -	

```
In [54]: from sklearn.model_selection import KFold,GridSearchCV,cross_val_score
         kf= KFold(n_splits=5,shuffle=True,random_state=42)
         param={
             'max_depth':[4,5,7],
             'max_leaf_nodes':[2,3],
             'random_state':[42,56,72],
             'criterion':["gini",'entropy','log_loss']

         }

In [55]: grcv=GridSearchCV(rf,param,cv=kf)
         grcv.fit(x_train,y_train)
         grcv.best_params_

In [56]: cv_result=cross_val_score(rf,x_train,y_train,cv=kf)
         cv_result

Out[56]: array([0.88477254, 0.88967584, 0.88586216, 0.89264305, 0.88692098])
```