Project Development Phase
Model Performance Test

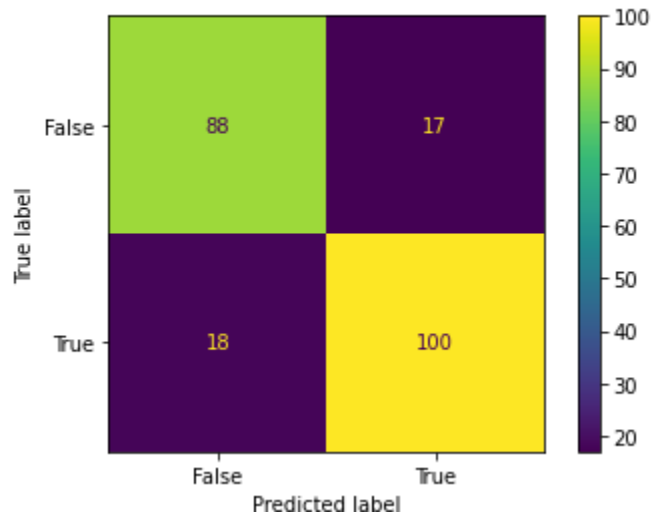|	
Date	10 November 2022
Team ID	PNT2022TMID21753
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	10 Marks

Model Performance Testing:

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

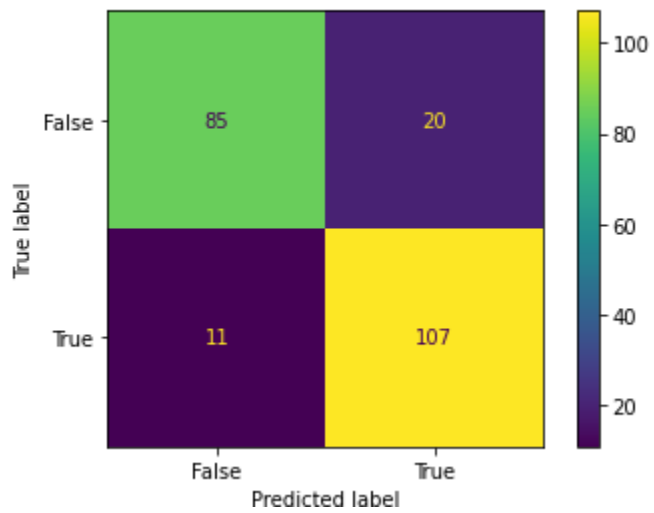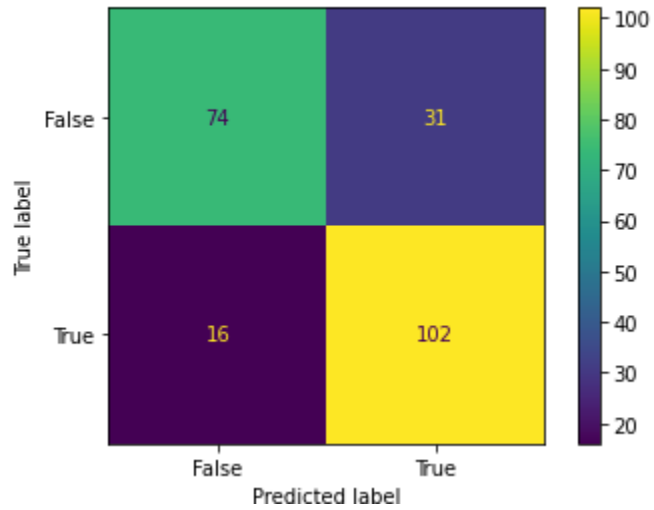| S.No.	Parameter	Values

1.	Metrics	**Classification Model: Decision Tree**
		 Accuracy Score - 84%
		
		Classification Report
		`   precision recall  f1-score   support`
		`0  0.83     0.84    0.83        105`
		`1  0.85     0.85     0.85       118`

2.		**Classification Model: Random Forest**
		Accuracy Score - 84%
		
		Classification Report
		`   precision recall  f1-score   support`
		`0  0.89     0.81    0.85        105`
		`1  0.84     0.91     0.87       118`

3.		**Classification Model: KNN**
		Accuracy Score - 78%
		
		Classification Report
		`   precision recall  f1-score   support`
		`0  0.82     0.70    0.76        105`
		`1  0.77     0.86     0.81       118`

4.		**Classification Model: XGBoost**
		Accuracy Score - 85%
		
		Classification Report
		`   precision recall  f1-score   support`
		`0  0.90     0.77    0.83        105`
		`1  0.82     0.92     0.87       118`

DECISION TREE CLASSIFIER

Confusion Matrix

RANDOM FOREST CLASSIFIER

Confusion Matrix

KNN

Confusion Matrix

XG BOOST

Confusion Matrix