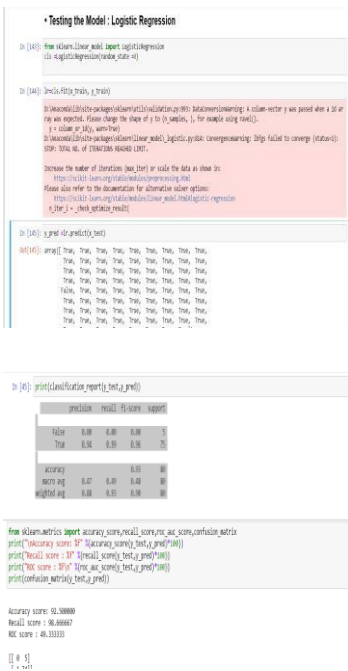



Project Development Phase Model Performance Test

Date	16 November 2022
Team ID	PNT2022TMID32265
Project Name	Project – University Admit Eligibility Predictor
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot
1.	Metrics	<p>Regression Model: Logistic Regression</p> <p>Classification Model:</p> <ul style="list-style-type: none"> Confusion Matrix - $\begin{bmatrix} 0 & 5 \\ 1 & 74 \end{bmatrix}$ Accuracy Score - 92.50000 Recall Score - 98.666667 ROC Score - 49.333333 Classification Report : <pre>precision - 0.88 support - 80 f1-score - 0.90 recall - 0.93</pre> 	 <pre> • Testing the Model : Logistic Regression In [34]: from sklearn.linear_model import LogisticRegression logit = LogisticRegression(max_iter=1000) In [35]: from sklearn.metrics import accuracy_score, recall_score, f1_score y_pred = logit.predict(X_test) In [36]: from sklearn.metrics import confusion_matrix cm = confusion_matrix(y_test, y_pred) In [37]: print(cm) [[0 5] [1 74]] In [38]: from sklearn.metrics import accuracy_score, recall_score, f1_score acc = accuracy_score(y_test, y_pred) rec = recall_score(y_test, y_pred) f1 = f1_score(y_test, y_pred) In [39]: print("Accuracy score: %.3f" % acc) print("Recall score: %.3f" % rec) print("F1 score: %.3f" % f1) Accuracy score: 0.92500000 Recall score: 0.98666667 F1 score: 0.49333333 [[0 5] [1 74]] </pre>
2.	Tune The Model	<p>Hyper parameter Tuning:(GridSearchCV)</p> <p>clf.best_score_ - 0.921875</p> <p>Validation Method – GridSearchCV (estimator=SVC ()</p>	 <pre> from sklearn.linear_model import LogisticRegression logit = LogisticRegression(max_iter=1000) from sklearn.metrics import accuracy_score, recall_score, f1_score y_pred = logit.predict(X_test) from sklearn.metrics import confusion_matrix cm = confusion_matrix(y_test, y_pred) from sklearn.metrics import accuracy_score, recall_score, f1_score acc = accuracy_score(y_test, y_pred) rec = recall_score(y_test, y_pred) f1 = f1_score(y_test, y_pred) print("Accuracy score: %.3f" % acc) print("Recall score: %.3f" % rec) print("F1 score: %.3f" % f1) Accuracy score: 0.92500000 Recall score: 0.98666667 F1 score: 0.49333333 [[0 5] [1 74]] </pre>