<p style="text-align:center;">Project Development Phase
Model Performance Test</p>

Date	18 November 2022
Team ID	PNT2022TMID08827
Project Name	University Admit Eligibility Predictor
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	**Regression Model:** Accuracy Score, Recall Score, Roc Score, Confussion Matrix **Classification Model:** Confusion Matrix - , Accuray Score- & Classification Report -	below
2.	Tune the Model	Hyperparameter Tuning - Validation Method -	below

Metrics:
Linear Regression Model

```
In [55]:   from sklearn.metrics import accuracy_score, recall_score, roc_auc_score, confusion_matrix

           print('Accuracy Score:', (accuracy_score(y_test, y_pred)))
           print('Recall Score:', (recall_score(y_test, y_pred)))
           print('ROC AUC Score:', (roc_auc_score(y_test, y_pred)))
           print('Confussion Matrix:\n', confusion_matrix(y_test, y_pred))

           Accuracy Score: 0.9666666666666667
           Recall Score: 1.0
           ROC AUC Score: 0.75
           Confussion Matrix:
            [[ 2  2]
            [ 0 56]]
```

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 Accuracy Score: 0.9666666666666667
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```

Tune the Mode

Hyperparameter Tuning - Validation Method

MODELING AND TRAINING

```
In [48]: from sklearn.ensemble import GradientBoostingRegressor
         rgr = GradientBoostingRegressor()
         rgr.fit(X_train,y_train)

Out[48]: GradientBoostingRegressor()

In [49]: rgr.score(X_test,y_test)

Out[49]: 0.733470845801191
```