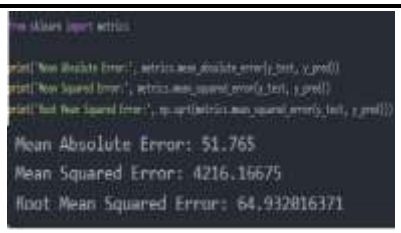
Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID41467
Project Name	Project - AI Powered Nutrition analyzer for fitness enthusiasts
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Regression Model:** Random Forest MAE - 51.765 MSE -4216.16675 RMSE -64.932016371 Accuracy - 80.43%	
2.	Metrics	Recall,Precision,F1 score Recall:0.66 Precision:1.0 F1_score:0.8	

Screenshots:

Metrics:

1 . Accuracy,Recall,Precision,F1 score

```
[51] from sklearn.metrics import accuracy_score, recall_score, precision_score, f1_score
     print(accuracy_score(labels, predict_x))
     print(recall_score(labels, predict_x))
     print(precision_score(labels, predict_x))
     print(f1_score(labels, predict_x))

     0.8
     0.6666666666666666
     1.0
     0.8
```

2. Mean absolute error:

Mean Squared error:

Root mean Squared error:

```
from sklearn import metrics

print('Mean Absolute Error:', metrics.mean_absolute_error(y_test, y_pred))
print('Mean Squared Error:', metrics.mean_squared_error(y_test, y_pred))
print('Root Mean Squared Error:', np.sqrt(metrics.mean_squared_error(y_test, y_pred)))
```

```
Mean Absolute Error: 51.765
Mean Squared Error: 4216.16675
Root Mean Squared Error: 64.932016371
```