

## Project Development Phase Model Performance Test

Date	24 October 2023
Team ID	Team-592454
Project Name	Project - Machine Learning Approach For Predicting The Rainfall
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	<b>Regression Model:</b> MAE - , MSE - , RMSE - , R2 score -  <b>Classification Model:</b> Confusion Matrix - , Accuray Score- & Classification Report -	Screenshot Attached Below

The screenshot shows a Google Colab notebook interface. The notebook title is "Rain Prediction.ipynb". The code cell contains the following Python code:

```
print(conf_matrix)

[[22067    0]
 [   11 6361]]

from sklearn.metrics import mean_absolute_error, mean_squared_error, r2_score

# Calculate metrics
mae = mean_absolute_error(y_test, y_pred)
mse = mean_squared_error(y_test, y_pred)
rmse = mean_squared_error(y_test, y_pred, squared=False)
r2 = r2_score(y_test, y_pred)

# Print the metrics
print(f"MAE: {mae}")
print(f"MSE: {mse}")
print(f"RMSE: {rmse}")
print(f"R2 score: {r2}")
```

The output of the code cell shows the confusion matrix and the calculated metrics:

```
MAE: 0.000386792784556419
MSE: 0.000386792784556419
RMSE: 0.019667048191236502
R2 score: 0.9977752155301959
```

The status bar at the bottom indicates "0s completed at 4:21 AM".