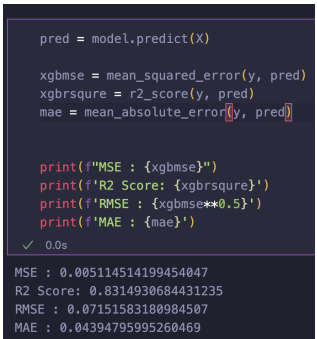
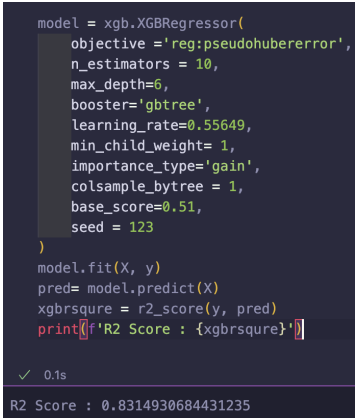


Project Development Phase Model Performance Test

Date	9 November 2023
Team ID	Team-591658
Project Name	Machine Learning approach for Employee Performance Prediction
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: MSE : 0.005114514199454047 R2 Score: 0.8314930684431235 RMSE : 0.07151583180984507 MAE : 0.04394795995260469	 <pre> pred = model.predict(X) xgbmse = mean_squared_error(y, pred) xgbrsqre = r2_score(y, pred) mae = mean_absolute_error(y, pred) print(f"MSE : {xgbmse}") print(f'R2 Score: {xgbrsqre}') print(f'RMSE : {xgbmse**0.5}') print(f'MAE : {mae}') </pre> <p>✓ 0.0s</p> <p>MSE : 0.005114514199454047 R2 Score: 0.8314930684431235 RMSE : 0.07151583180984507 MAE : 0.04394795995260469</p>
2.	Tune the Model	Hyperparameter Tuning - objective ='reg:pseudohubererror', n_estimators = 10, max_depth=6, booster='gbtree', learning_rate=0.55649, min_child_weight= 1, importance_type='gain', colsample_bytree = 1, base_score=0.51	 <pre> model = xgb.XGBRegressor(objective ='reg:pseudohubererror', n_estimators = 10, max_depth=6, booster='gbtree', learning_rate=0.55649, min_child_weight= 1, importance_type='gain', colsample_bytree = 1, base_score=0.51, seed = 123) model.fit(X, y) pred= model.predict(X) xgbrsqre = r2_score(y, pred) print(f'R2 Score : {xgbrsqre}') </pre> <p>✓ 0.1s</p> <p>R2 Score : 0.8314930684431235</p>
		Validation Method - train_test_split	