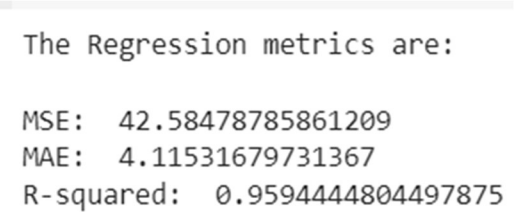
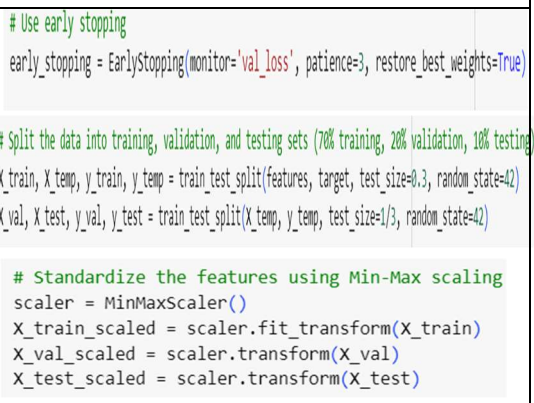


## Project Development Phase Model Performance Test

Date	16 November 2023
Team ID	Team-592664
Project Name	T20 Totalitarian-Mastering Score Predictions
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 -	 <p>The Regression metrics are:</p> <p>MSE: 42.58478785861209  MAE: 4.11531679731367  R-squared: 0.9594444804497875</p>
2.	Tune the Model	<u>Hyperparameter Tuning –</u> <ul style="list-style-type: none"> <li>GRU layer=50 units</li> <li>Activation function='relu'</li> <li>Optimizer='adam'</li> <li>Loss Function='MSE'</li> <li>Epoch=50</li> <li>Batch size=32</li> </ul> <u>Validation Method –</u> <ul style="list-style-type: none"> <li>Early Stopping</li> <li>Scaling of data using minmaxscaler</li> <li>Reshaping of data</li> <li>Data split into: Training=70%, Validation=20%, Testing=10%</li> </ul>	 <pre># Use early stopping early_stopping = EarlyStopping(monitor='val_loss', patience=3, restore_best_weights=True)  # Split the data into training, validation, and testing sets (70% training, 20% validation, 10% testing) X_train, X_temp, y_train, y_temp = train_test_split(features, target, test_size=0.3, random_state=42) X_val, X_test, y_val, y_test = train_test_split(X_temp, y_temp, test_size=1/3, random_state=42)  # Standardize the features using Min-Max scaling scaler = MinMaxScaler() X_train_scaled = scaler.fit_transform(X_train) X_val_scaled = scaler.transform(X_val) X_test_scaled = scaler.transform(X_test)</pre>