Random Forest Review

1. Random Forest:

Categorial Features: *member_casual , season*
Contínuos Features: *TMAX*
Target Variable: *rideable_type*
NaN Values: dropped all the rows with null values

Random Forest Accuracy: 0.64
Random Forest Confusion Matrix: [[1650972 10486]
 [937518 11376]]

The Random Forest model achieves an accuracy of 64%, indicating moderate effectiveness in predicting the correct rideable_type. However, the confusion matrix reveals a significant imbalance in predictive performance: while true negatives are high at 1,650,972, suggesting good specificity, the model suffers from a high number of false negatives (937,518), indicating poor sensitivity or a strong bias toward the more prevalent class. This results in only 11,376 true positives, which is concerning for applications needing reliable identification of the positive class. The low false positives (10,486) suggest that the model is conservative, potentially at the cost of missing many true positive cases.