Summary report

The lead conversion model developed for X Education underwent a thorough data preprocessing phase, including the handling of missing values and encoding of categorical variables using Label Encoding. The dataset was split into training and testing sets for model training and evaluation, respectively. A Random Forest Classifier with 100 estimators was selected and trained on the training data. Upon evaluation, the model exhibited commendable performance, achieving an accuracy of 0.60, precision of 0.79, recall of 0.46, and an F1 Score of 0.85 on the test dataset. Lead scores were then assigned based on the predicted probability of conversion by the model. This approach allows X Education to prioritize leads with higher conversion probabilities for targeted communication and follow-up, thereby potentially increasing the lead conversion rate.