Finding of ML Models

In this assignment, we used three models: decision tree, random forest and naive Bayes.
we used the following measures: accuracy, F1 Score, weighted recall and weighted precision.

Decision tree: support tool that uses a tree-like model of decisions and their possible consequences.

Random forest: a powerful and versatile supervised machine learning algorithm that grows and combines multiple decision trees to create a “forest.” It can be used for both classification and regression problems.

Naive Bayes classifiers: a family of simple "probabilistic classifiers" based on applying Bayes' theorem.

Out[27]:

	Accuracy	F1 score	Weighted Precision	Weighted Recall
Decision Tree	0.811284	0.765974	0.795616	0.811284
Random Forest	0.747082	0.638930	0.558131	0.747082
Naive Bayes	0.962062	0.956542	0.964065	0.962062

Based on the measures the Naive Bayes is the best model
We observed that decision tree and random forest didn’t perform well due to unbalanced label class