

SMOTE

ALGORITHM	IMBALANCED DATASET	BALANCED DATASET
LOGISTIC REGRESSION	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 85.48707753479125 % Accuracy of test data = 86.11111111111111 %	After applying SMOTE Accuracy of train data = 83.65817091454272 % Accuracy of test data = 86.41114982578398 %
SUPPORT VECTOR MACHINE	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 92.44532803180915 % Accuracy of test data = 85.64814814814815 %	After applying SMOTE Accuracy of train data = 94.45277361319341 % Accuracy of test data = 87.10801393728222 %
DECISION TREE	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 90.25844930417495 % Accuracy of test data = 86.57407407407408 %	After applying SMOTE Accuracy of train data = 87.55622188905548 % Accuracy of test data = 89.89547038327527 %
NAÏVE BAYES	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 85.2882703777336 % Accuracy of test data = 87.03703703703704 %	After applying SMOTE Accuracy of train data = 85.30734632683658 % Accuracy of test data = 87.10801393728222 %
RANDOM FOREST	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 100.0 % Accuracy of test data = 90.27777777777779 %	After applying SMOTE Accuracy of train data = 100.0 % Accuracy of test data = 91.98606271777004 %
K NEAREST NEIGHBOUR	Before applying SMOTE - slightly imbalanced dataset Accuracy of train data = 89.06560636182903 % Accuracy of test data = 86.57407407407408 %	After applying SMOTE Accuracy of train data = 100.0 % Accuracy of test data = 88.50174216027874 %

For SVM, NB, RF, KNN there is a increase in the accuracy but for LR, DT there is a slight decrease in the training accuracy and increase in the testing accuracy on applying SMOTE.