

HSBC

The problem statement given is a Classification Problem.

1) Analysis:

- a) Calculating the number of rows and columns
- b) Describing the dataframe
- c) Checking the datatypes
- d) Checking the null values
- e) Checking the duplicate values
- f) Checking the value counts and performing label encoding
- g) Dropping the unique columns
- h) Grouping the dataset on the basis of "V6"
- i) Removing the outliers in "V4"
- j) Checking the class imbalance

2) Training the model

- a) Logistic Regression
- b) Oversampling technique(SMOTE: using knn)
- c) Decision tree classifier
- d) Gaussssian NB
- e) AdaBoosterClaassifier
- f) GradientBoostingClassifier
- g) RandomForestClassifier
- h) SVC

3) Testing the model using logistic regression