Python ML Classification Project

Loan status classification

Naive Bayes

Project Description:

In this particular project, we are using a dataset that contains information like loan id, gender education etc and using that to classify the loan status.

However, before you go ahead with the project, it is advised that you first pre-process the data, since it may contain some irregularities and noise. In addition, try various tricks and techniques in order to gain the best accuracy in your predictions.

Part-1: Data Exploration and Pre-processing

1) load the given dataset
2) check the null values
3) print the column names
4) create list for all the columns which have null values columns
5) fill all the null values with mean using for loops
6) get data information
7) describe dataset
8) display box plot for LIMIT_BAL
9) display box plot for age
10) drop all the null values
11) perform encoding on default status

Part-2: Working with Models

1) Create a features and target dataset
2) Split data into training and testing
3) Fit the Gaussian naive bayes classifier
4) Print the training and
5) Print the testing score
6) Find the accuracy score,
7) Find the precision score,
8) Find the recall score
9) Find the Confusion matrix
10) Find the Classification report