DATA MINING PROJECT

TITLE:- HOME LOAN PREDICTION



AGENDA:-

- Find weather the person is eligible for loan or not.
- ❖ Import data set and Finding weather the null values present in the data set.
- **A** Data preprocessing.
- Variable analysis.
- **\Delta** Log transformation.
- **&** Label encoding.
- Model training.

Problem Statement:-

A finance company wants to classify weather the person is eligible to get loan or not eligible. So when a customer fills online application, company wants to automate the loan based on some variables. Here let's help the company and make their work easy.

Taken columns: Loan_id, Gender, married, Dependents, Education, Self_Employed, ApplicationIncome,
CoapplicationIncome, LoanAmount, Loan_Amount_Term, Credit_History,
Property_Area, Loan_status

Data preprocessing:-

- There are "149" Null Values.
- For Categorical Columns :-

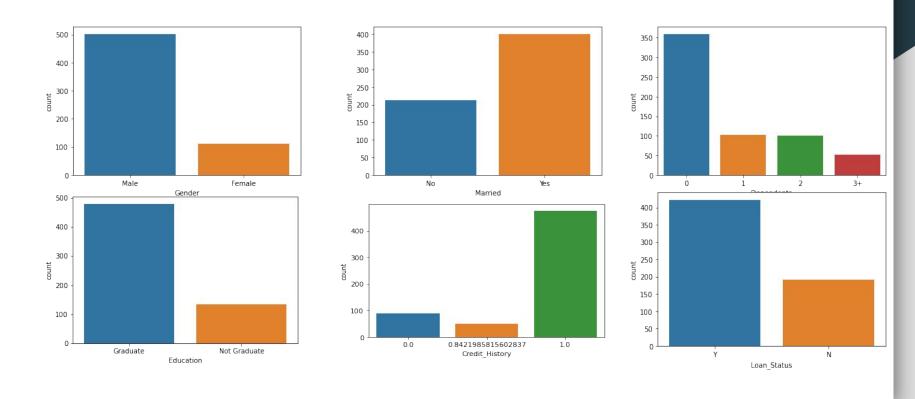


Filling null values for the categorical columns with mode values.

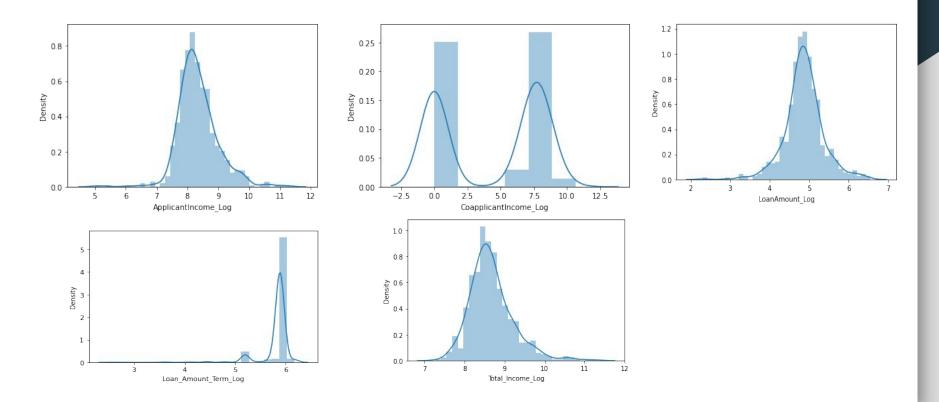
For Numerical Columns :-

Filled the null values for the numerical columns with mean.

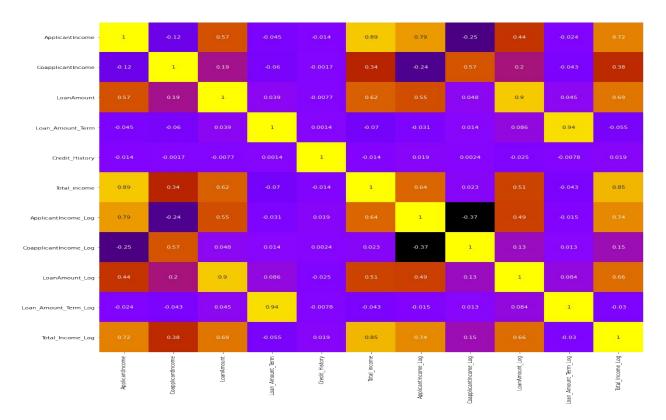
Variable analysis:-



Log transformation:-



HeatMap :-



- 0.8

0.6

- 0.4

- 0.2

0.0

-0.2

Result:-

- ➤ In Logistic regression we got most accuracy score that is 81.16883116883116.
- We can see that logistic regression fits the model better than the other classification models.

