



About Company

Dream Housing Finance company deals in all home loans. They have presence across all urban, semi urban and rural areas. Customers first apply for home loan after that company validates the customer eligibility for loan.

Problem

Company wants to automate the loan eligibility process (real time) based on customer detail provided while filling out an online application form. These details are Gender, Marital Status, Education, Number of Dependents, Income, Loan Amount, Credit History and others. To automate this process, they have given a problem to identify the customers segments, those are eligible for loan amount so that they can specifically target these customers. Here they have provided a partial data set.

Data

Variable	Description
Loan_ID	Unique Loan ID
Gender	Male/ Female
Married	Applicant married (Y/N)
Dependents	Number of dependents
Education	Applicant Education (Graduate/ Undergraduate)

Self_Employed	Self employed (Y/N)
ApplicantIncome	Applicant income
CoapplicantIncome	Co Applicant income
LoanAmount	Loan amount in thousands
Loan_Amount_Term	Term of loan in months
Credit_History	credit history meets guidelines
Property_Area	Urban/ Semi Urban/ Rural
Loan_Status	Loan approved (Y/N)

Note:

1. Perform EDA on the data.
2. Split the data into train and test.
3. Apply all the classification algorithms on train data pick the right model and then Test on Test data.
4. Apply all the Machine Learning algorithms and check which is the best model above all the classification models.