Loan Approval Prediction

Problem

A company wants to automate the loan eligibility process (real time) based on customer information provided while filling online application forms. 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 data set.

Data

Variable Descriptions:

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	Coapplicant 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)

train.csv - existing customers data with their loan status test.csv - new customers data

Question

Build 3 models using different algorithms to predict the loan approval status of new customers. (use data in test.csv)