LENDING CLUB CASE STUDY SUBMISSION

Ashvini Chandra

Case Study Objectives

- Identification of Loan Applicant traits that tend to 'default' paying back

- Understand the 'Driving Factors' or 'Driver Variables' behind Loan Default phenomena

- Loan Lending Organizations may choose to utilize this knowledge for its portfolio and risk assessment of new loan applicants

Data Cleaning Steps

- Delete columns: Delete unnecessary columns.

- Missing values: Treat missing values with appropriate approach.

- Filter rows: Filter by segment, filter by date period to get only the rows relevant to the analysis.
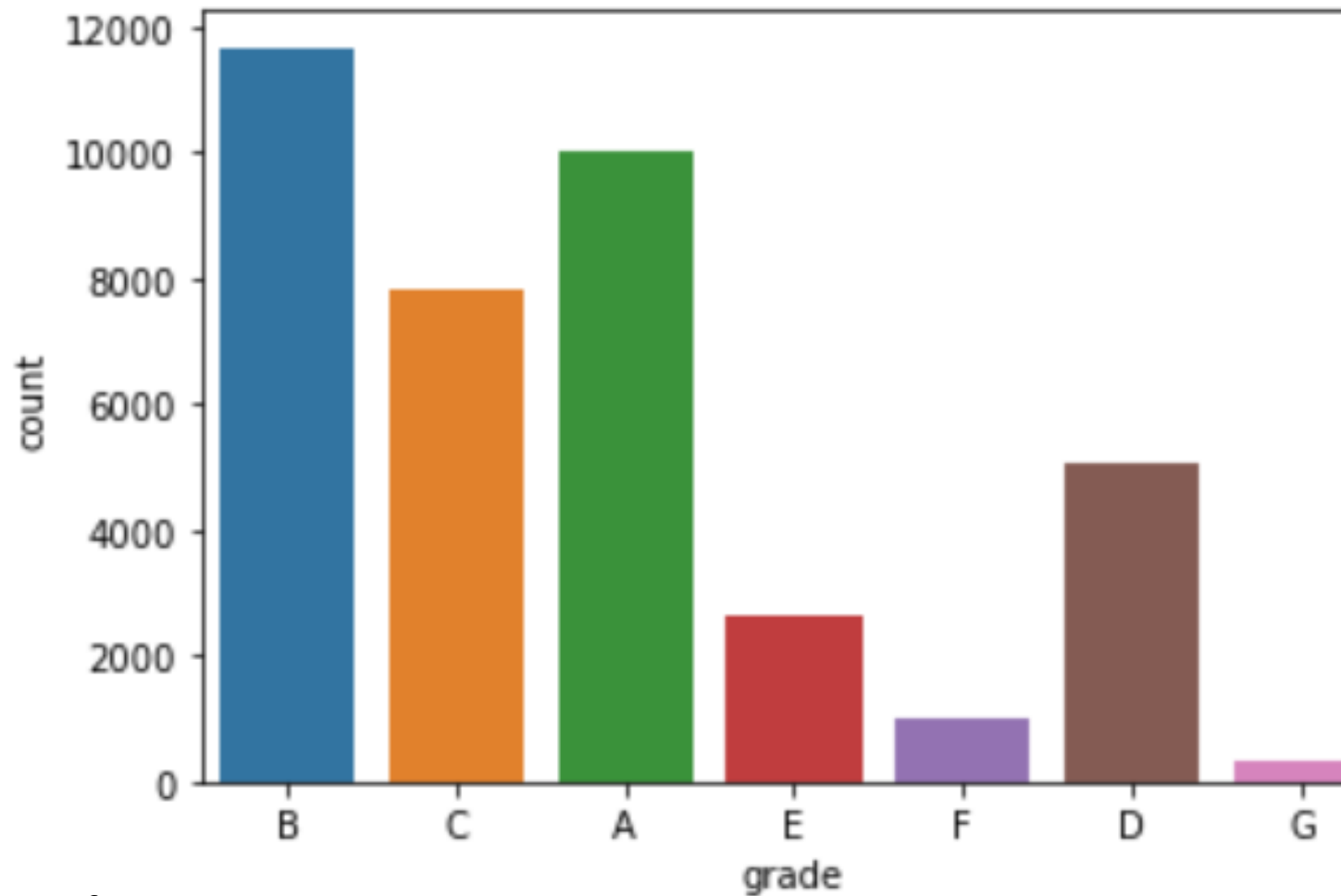
Analysis

- The essence of the whole project is to analyze and understand how consumer attributes and loan attributes are influencing the tendency of defaulting.

- We performed data cleaning and preparation on the Loan dataset, Imputed the NA values for all the variables

Loan Status Analysis
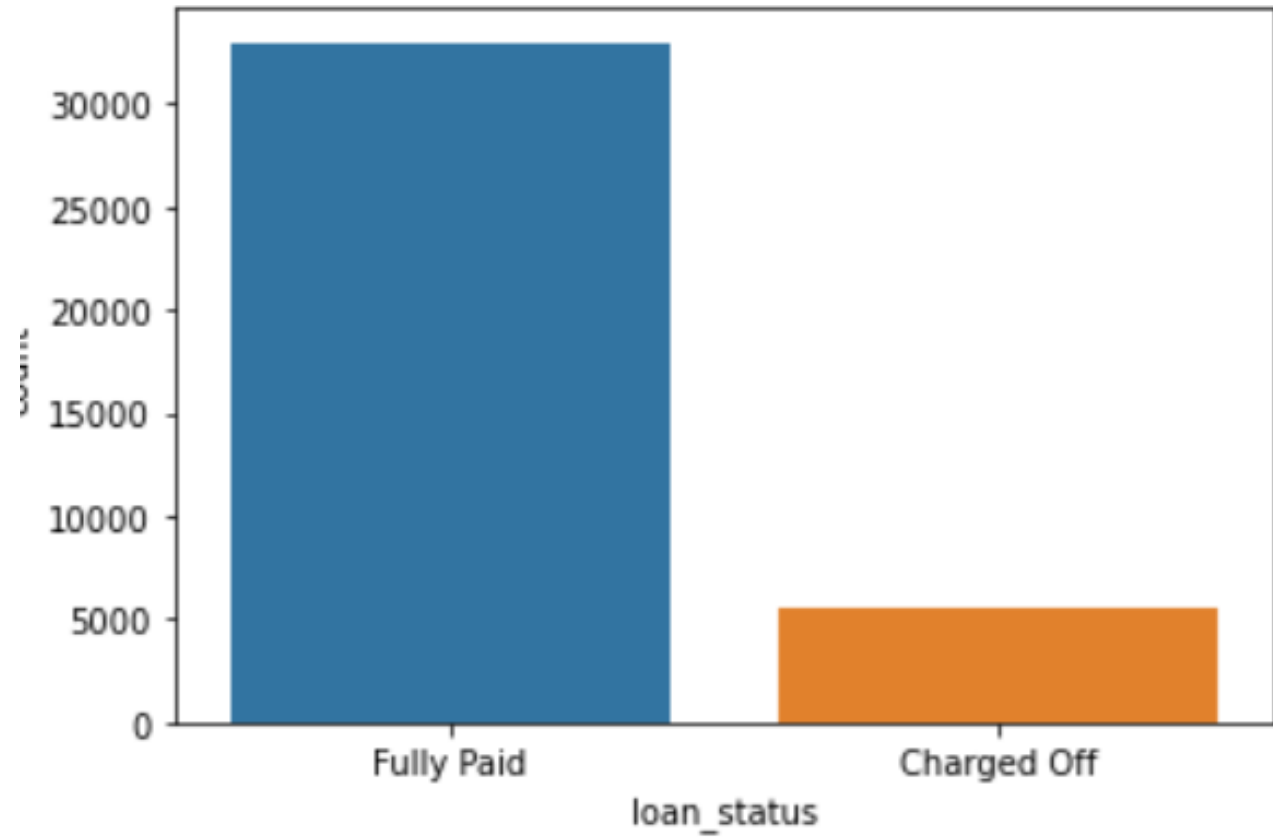
Inference:
1. Most of the loans are Fully Paid.
2. About 14% of loan are having status as defaulters

Loan Grade Analysis

Inference:
Most of the loans have grade of A and B. Therefore stating most of the loans are high graded loans

Loan Applicants work Experience Analysis

1. Majority of employees applying for the loan have more than 10 years of experience

2. Tendency of person to default the loan with 10 years of experience is also high. So company need to be careful when granting loan.
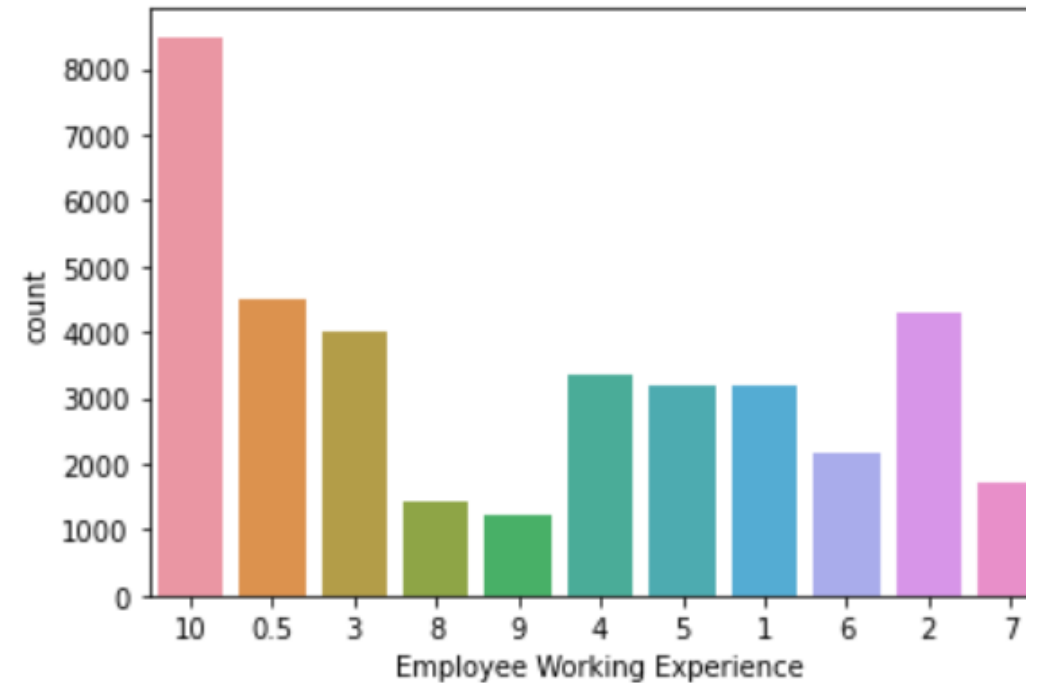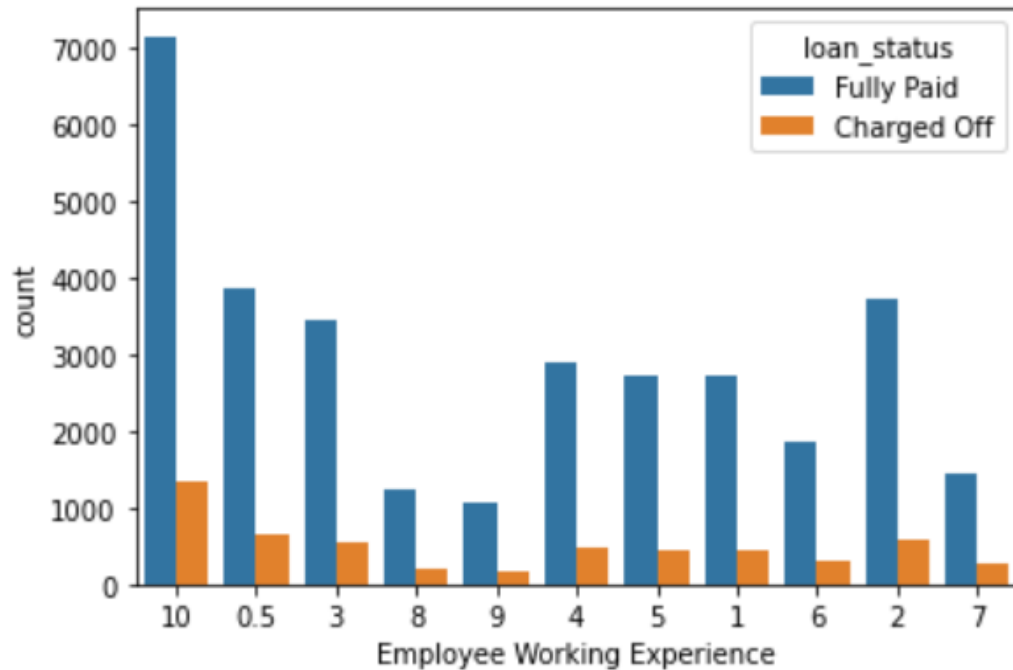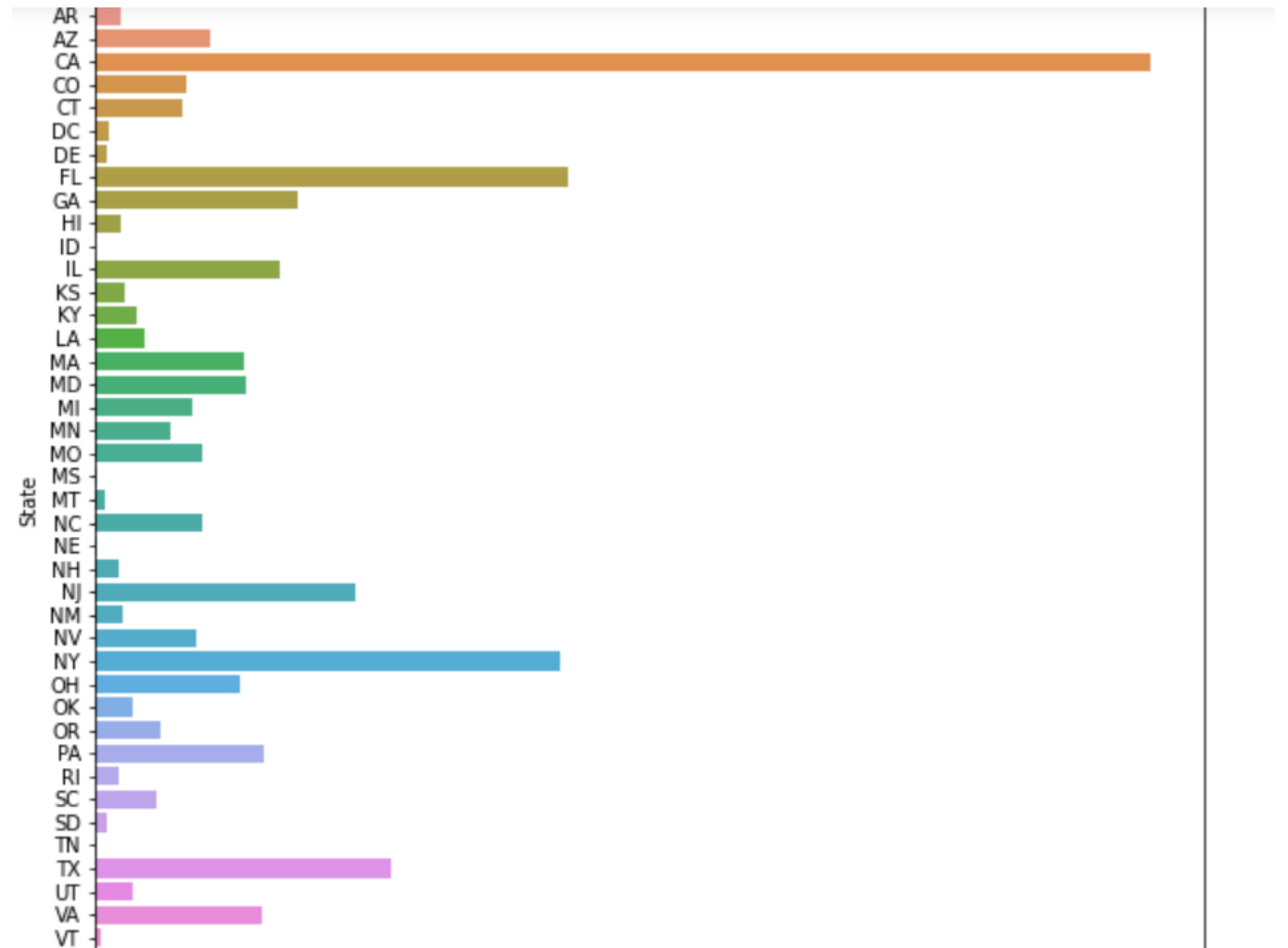
Loan Amount analysis
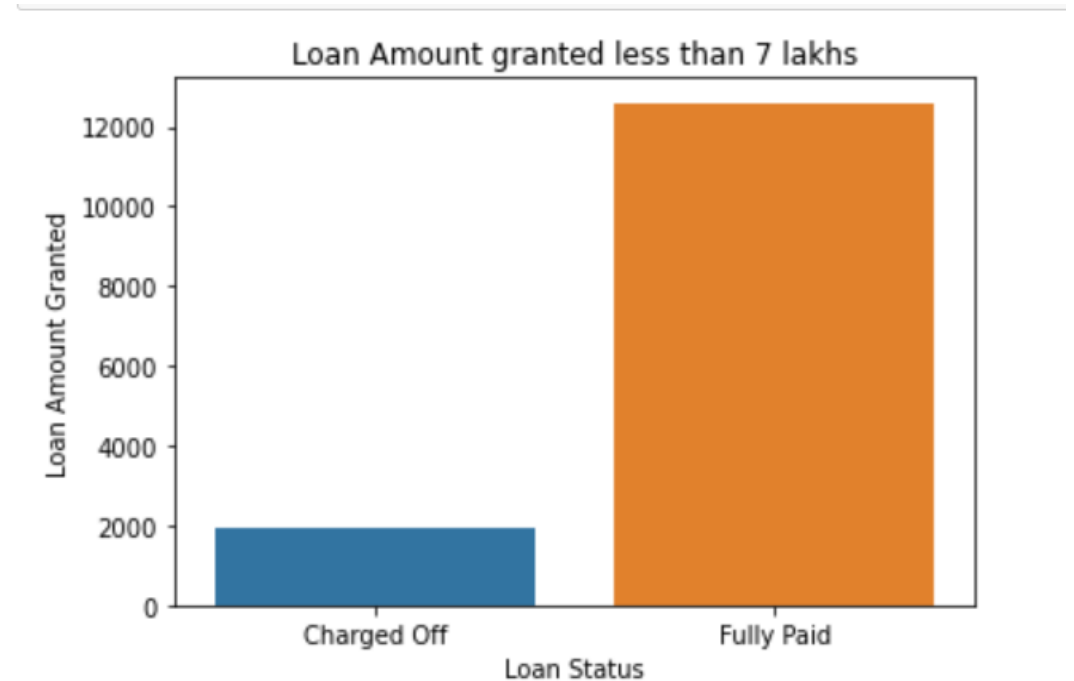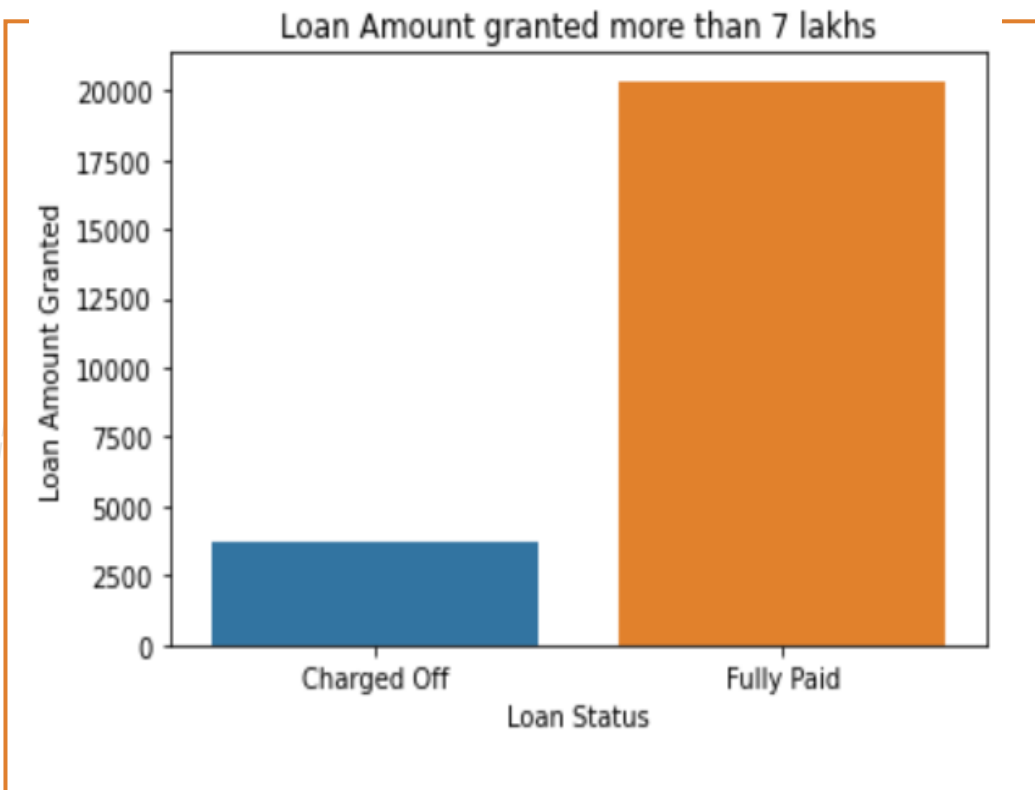
Probability of people with loan amount greater than 7 lakhs tends to default is more than the people with less than 7 lakh
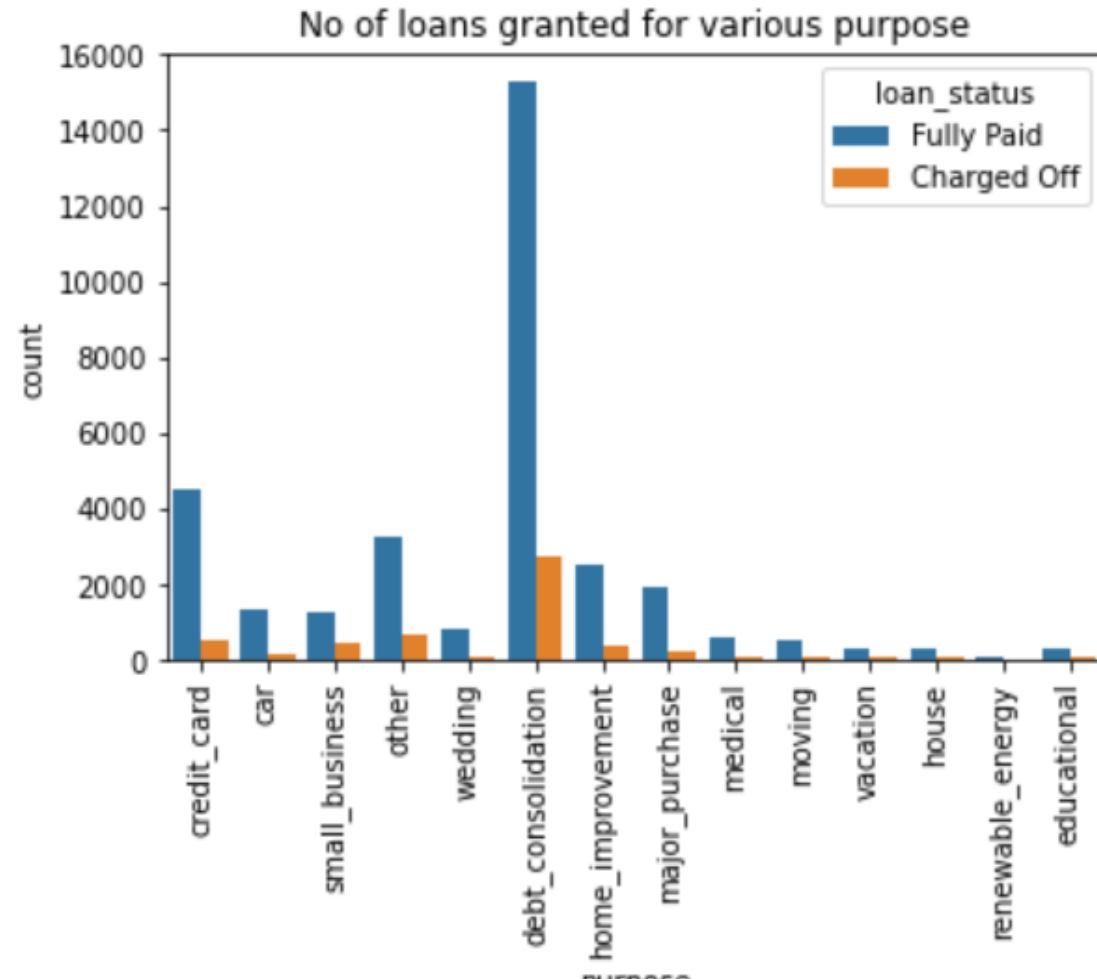
Loan Defaulters by State Analysis

- Observation: Applicants from state CA have high tendency to default the loan
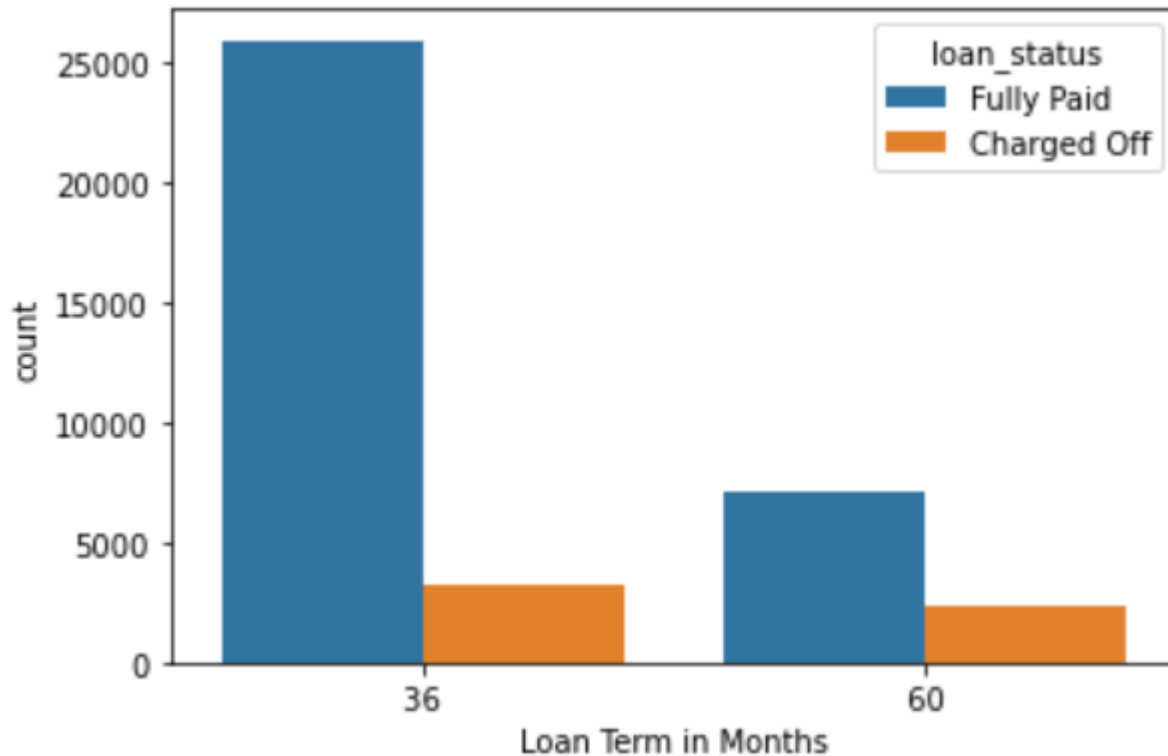
Purpose for applying Loan Analysis

- Observation:

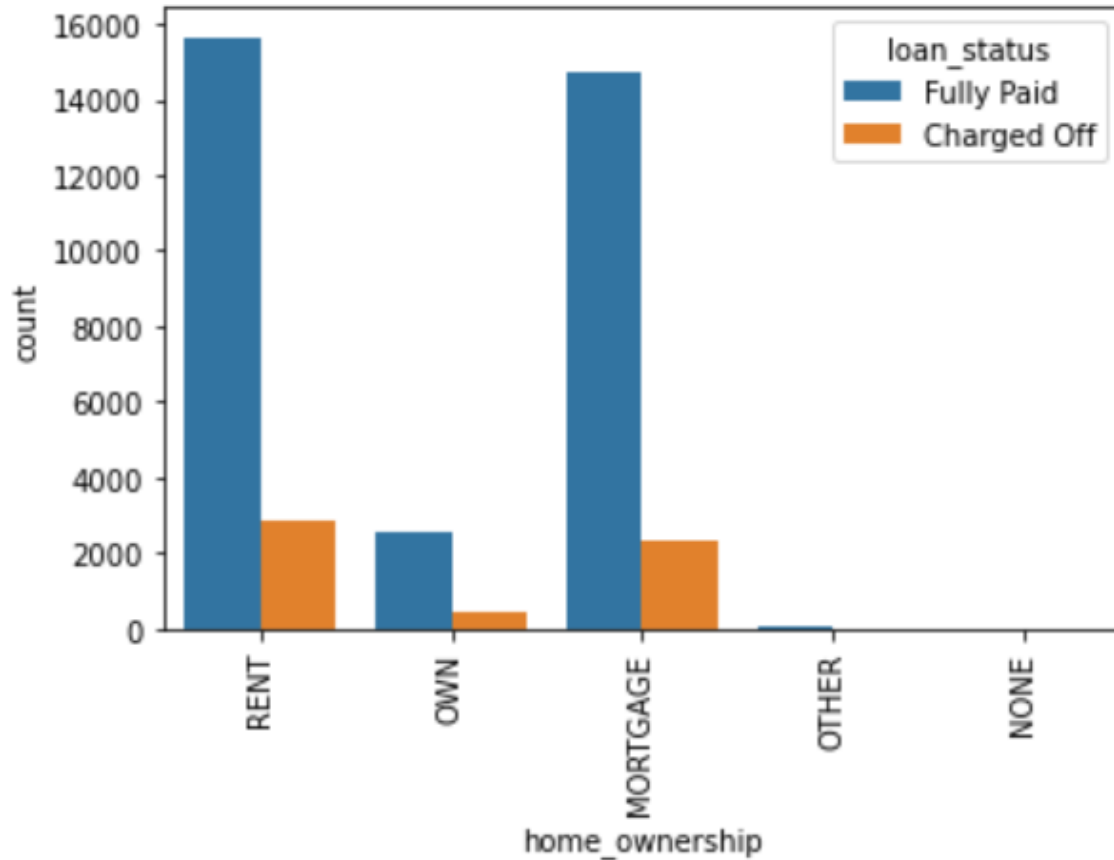 1. Most of the loans are granted were for debt consolidation.

No of loans granted for various purpose

Loan Tenure

Observation:
1. Most of the loans granted were of 36 months.
2. 2. And loans granted for 36 months have slightly high tendency to default.

Loan Status by Home Ownership

Observation: Applicants having there home rented or on mortgage have almost equal tendency to default the loan.

Conclusion

Results

1. Low grade loans have high tendency to default. Grading system is working as expected.

2. Extra scrutiny must be done for the applicants belonging to CA state, as tendency to default is high.

3. When the purpose is debt consolidation check applicant thoroughly as it has high tendency to default

Thank You