

Lending Club Case Study

Group Members:

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Objectives

- To identify if a loan applicant will be a defaulter
- Understand the data and driving factors for an applicant to be a defaulter.

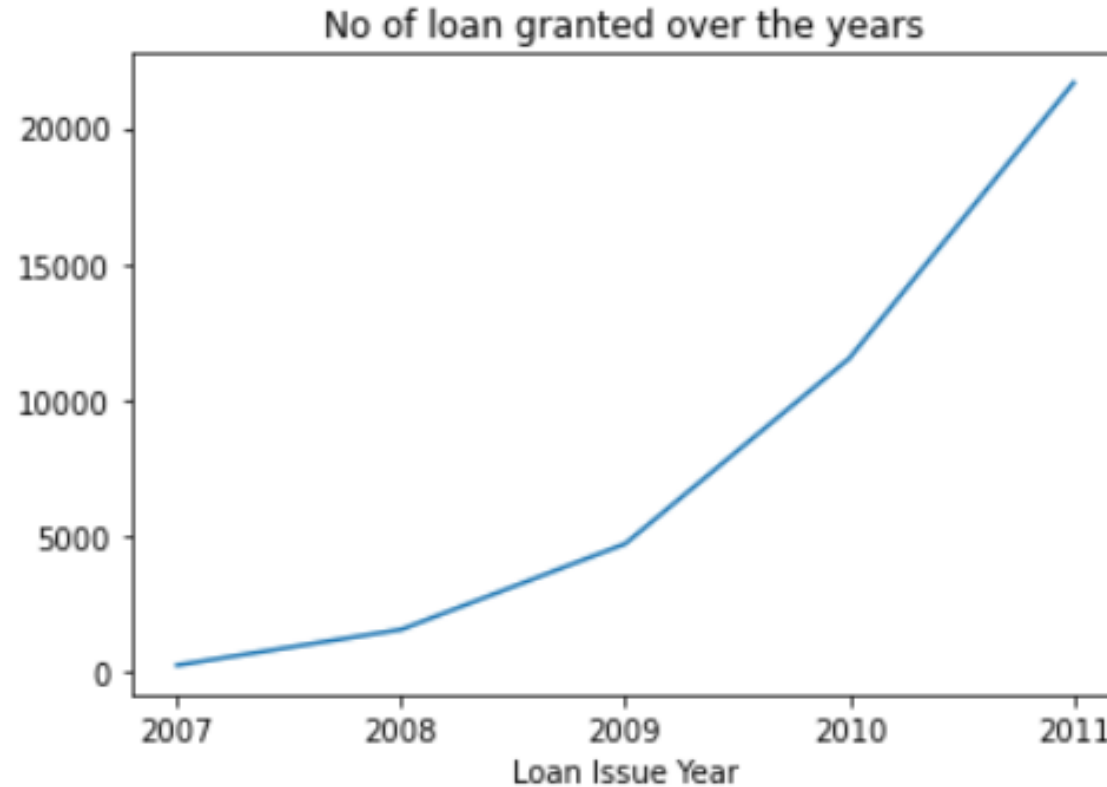
Steps for solving the problem

- Understanding the data
- Data cleaning
- Data Manipulation
- Data Analysis
- Recommendations

Data Cleaning and Manipulation

- Deleted unnecessary columns
- Missing values to be treated with appropriate approach
- Duplicate data to be deleted
- Created few new rows for date and year.
- Manipulated data where ever required so that the analysis would be easier

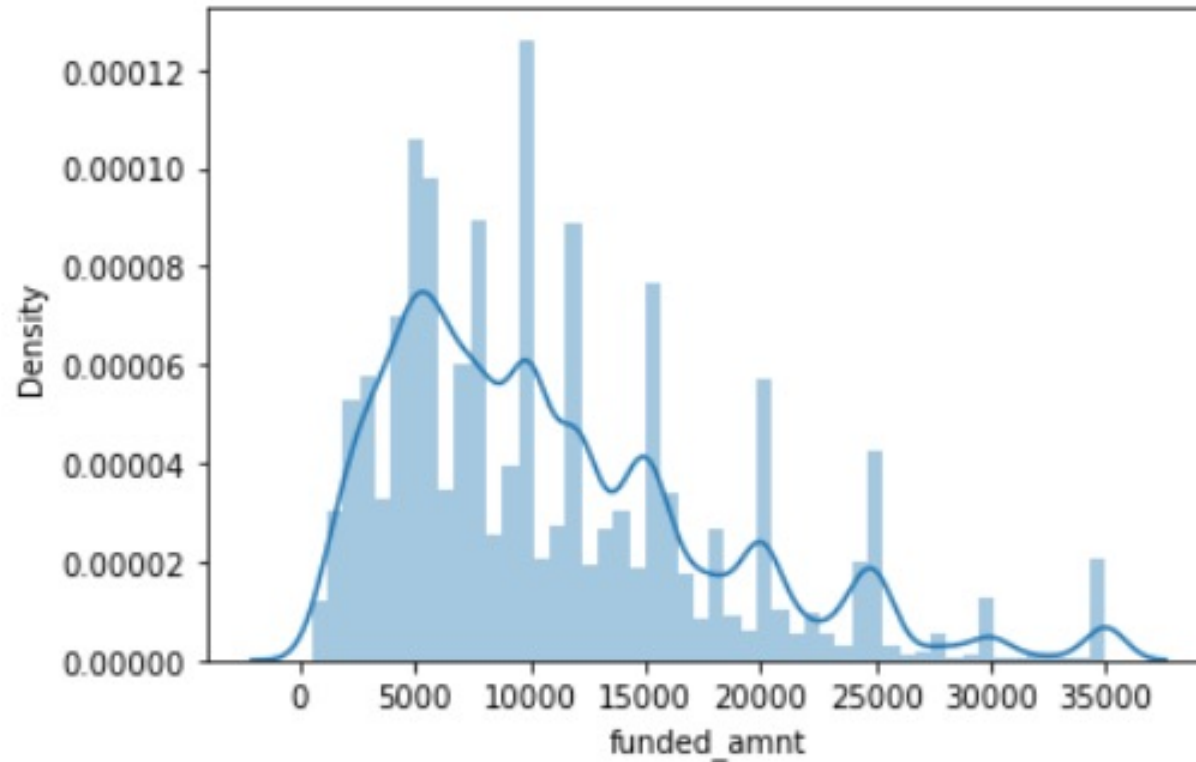
Loan granted Analysis



Observation:

The number of loans taken by people are increasing exponentially

Loan Amount Analysis



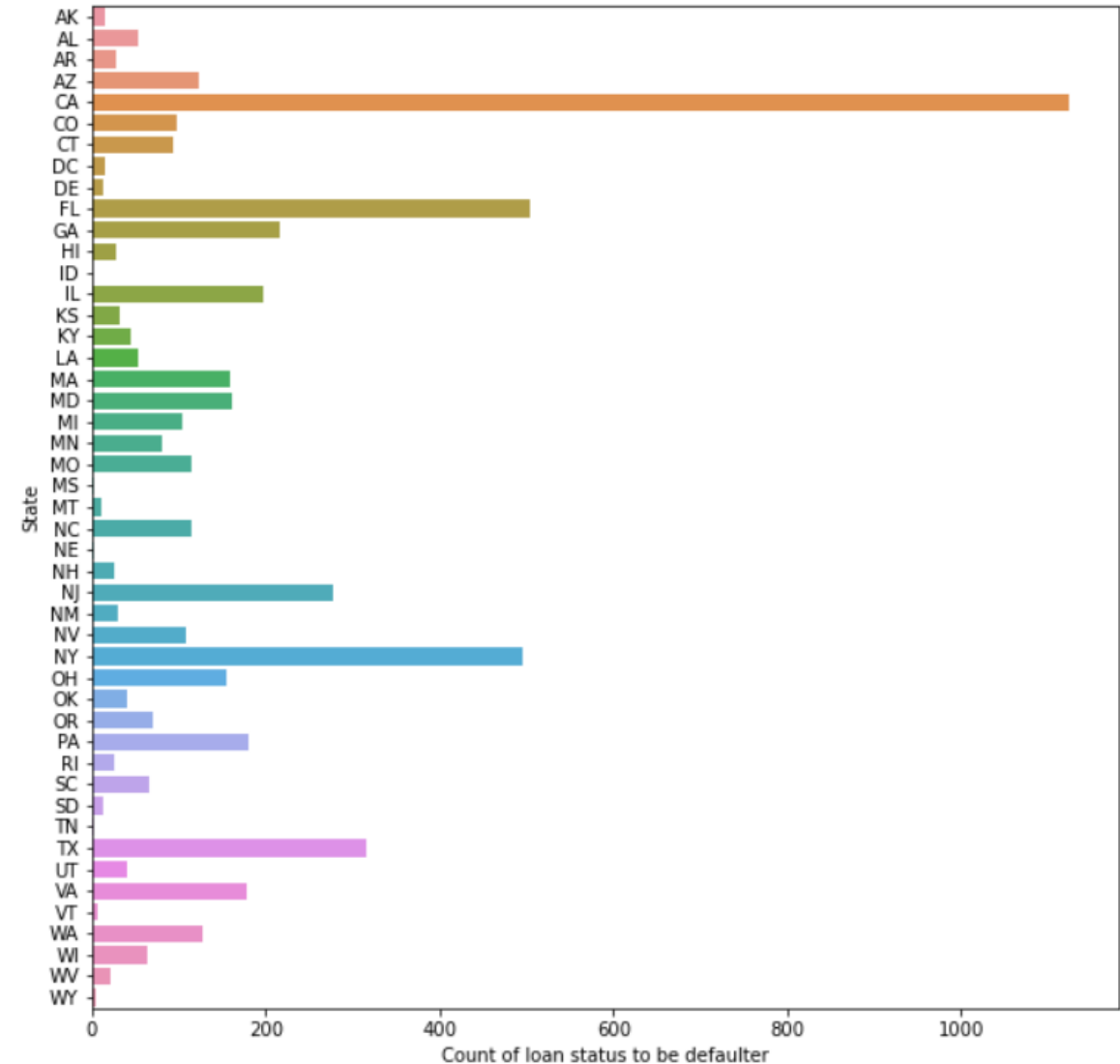
Observation

Most of the loans provided (Density) are for lesser amounts. The probability of a loan approval for a higher amount would be low.

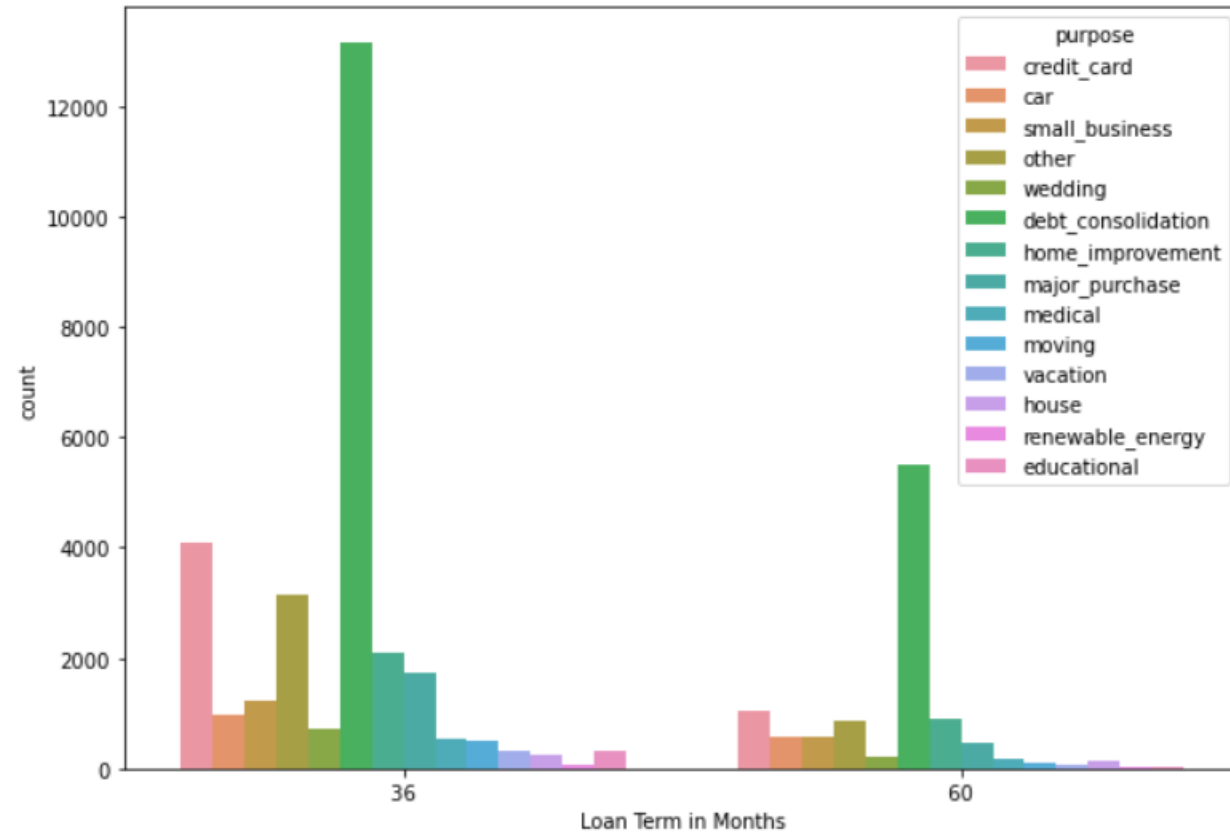
Loan defaulters by location

Observation

There is a higher number of defaulters from California State, which indicates that the lender has to double check an application from Californian Resident.



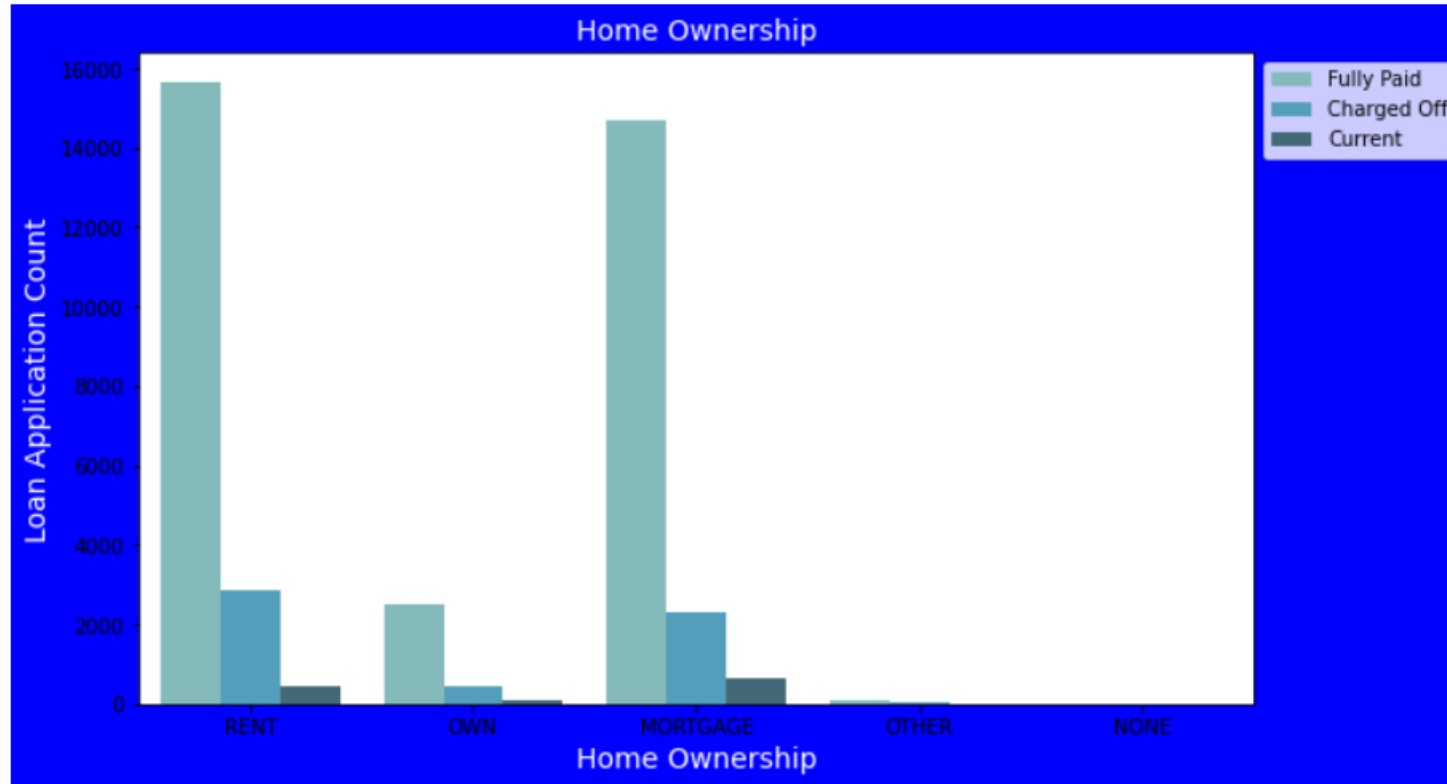
Purpose of Loan



Observation

Many of the applicants has taken loan for consolidating existing loans. Which means that the applicants have multiple loans.

Analysis based on Home Ownership



Observation

Applicants having a mortgage and renting seems to be taking more loans and also the ratio of the defaulters seem to be similar