Lending Club Case Study

Group Members :

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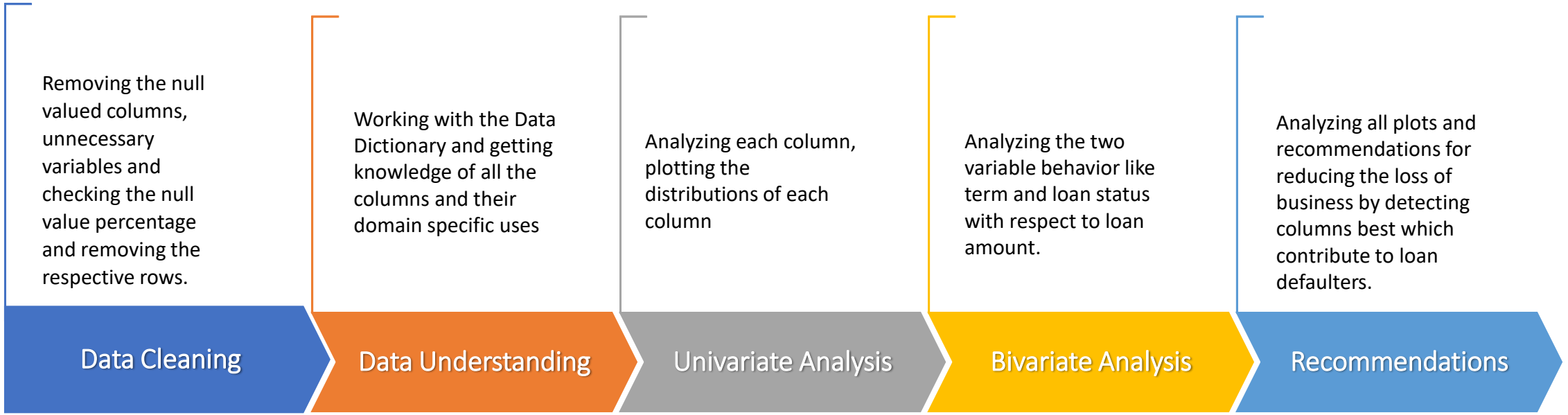
Problem *Statement* & Goal

- Lending club is the largest online loan marketplace, facilitating personal loans, business loans, and financing of medical procedures.

- Borrowers can easily access lower interest rate loans through a fast online interface.

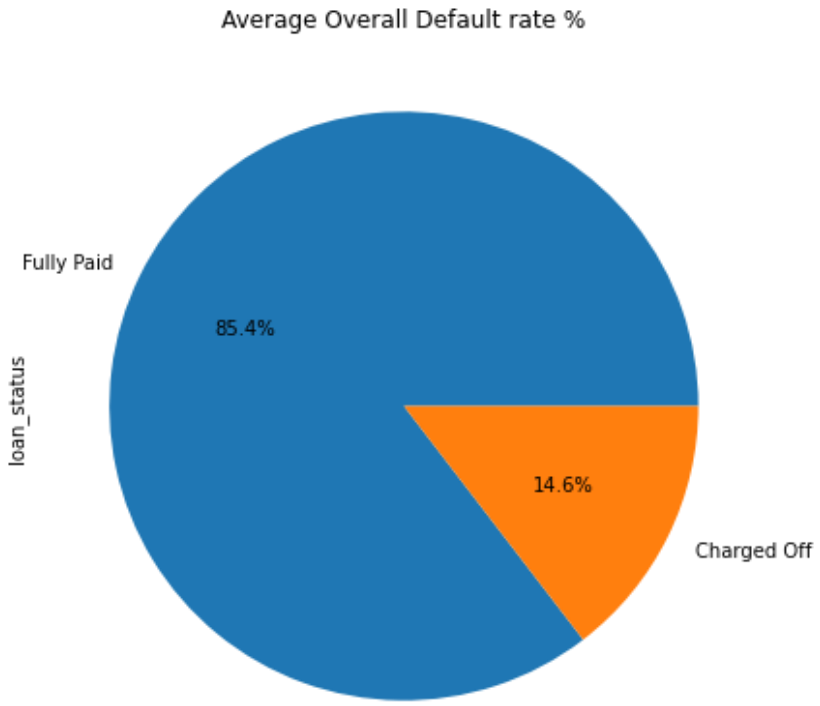
- The objective of analysis is to use the information about past loan applicants and find whether they ‘defaulted’ or not and for same what are the driving factors.

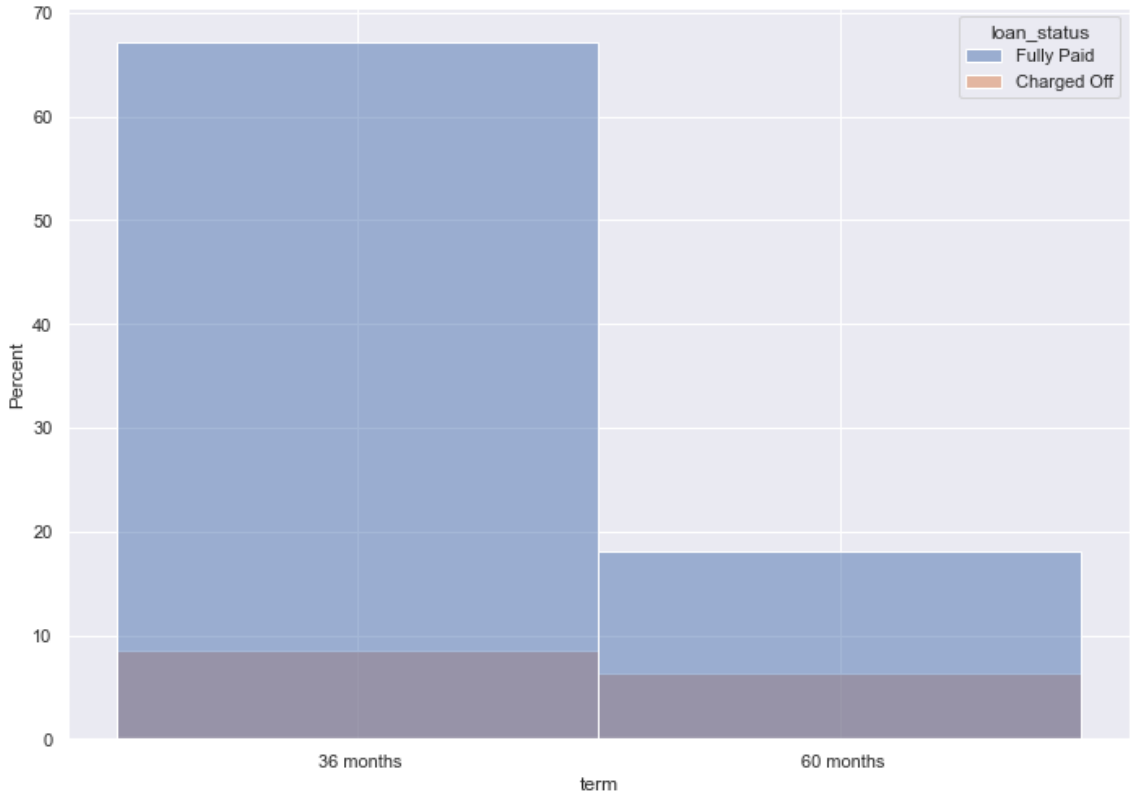
APPROACH


Removing the null valued columns, unnecessary variables and checking the null value percentage and removing the respective rows.
Data Cleaning
Working with the Data Dictionary and getting knowledge of all the columns and their domain specific uses
Data Understanding
Analyzing each column, plotting the distributions of each column
Univariate Analysis
Analyzing the two variable behavior like term and loan status with respect to loan amount.
Bivariate Analysis
Analyzing all plots and recommendations for reducing the loss of business by detecting columns best which contribute to loan defaulters.
Recommendations

Exploratory Data Analysis

Insights after analyzing the data





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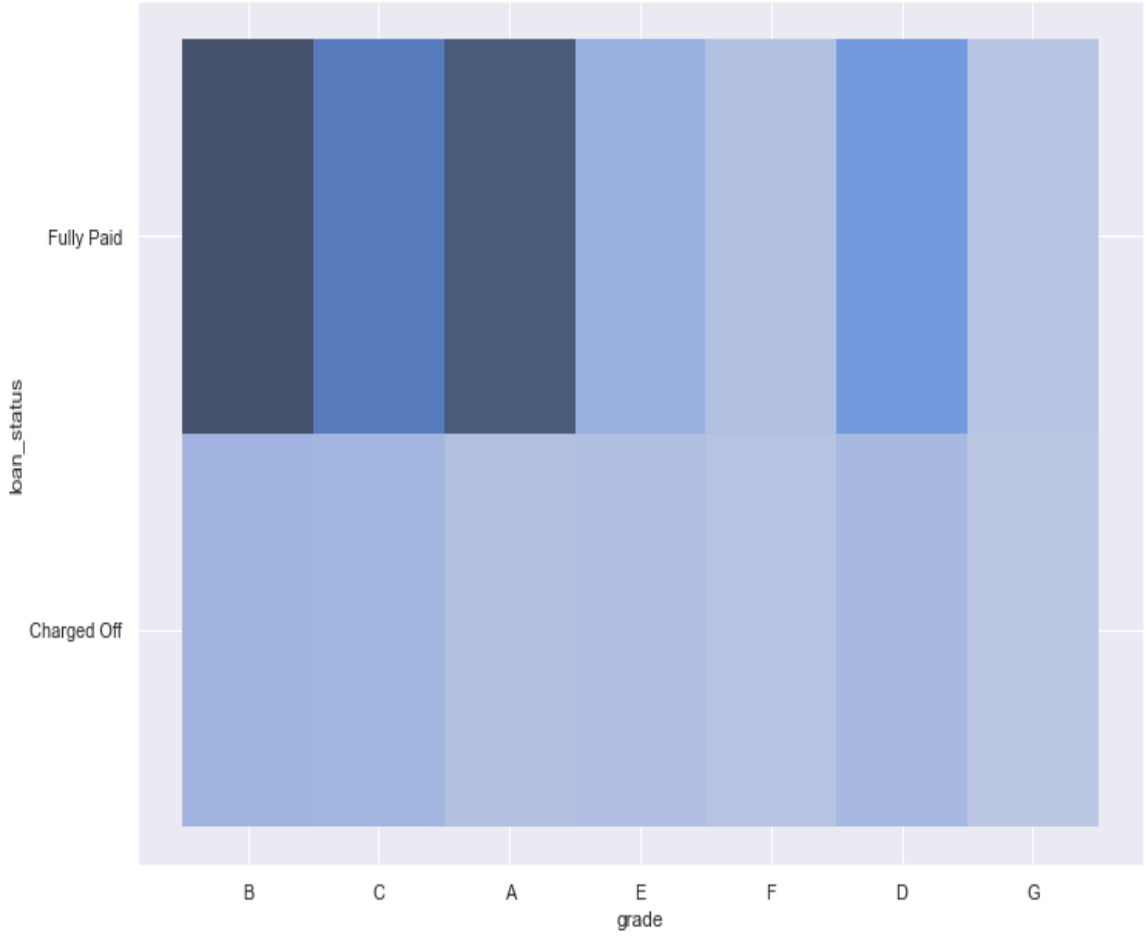

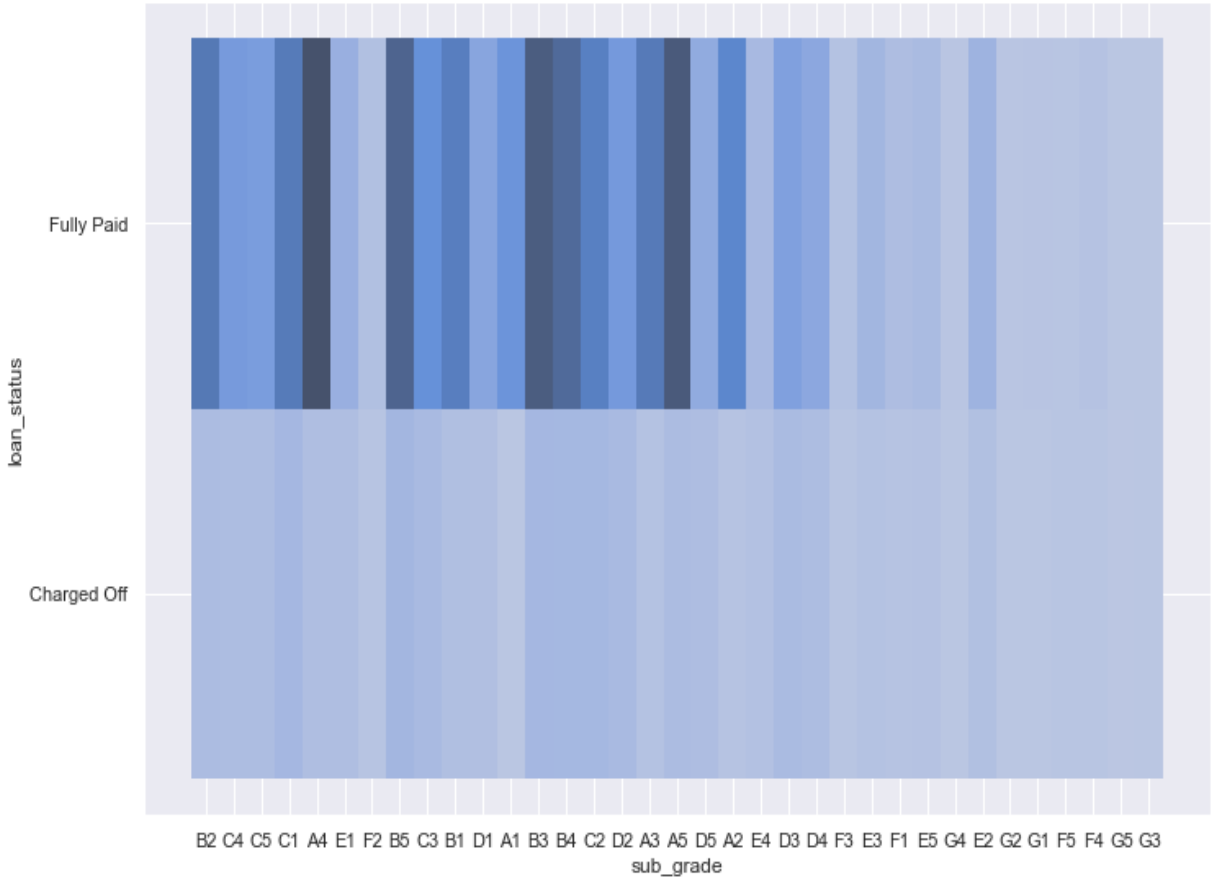

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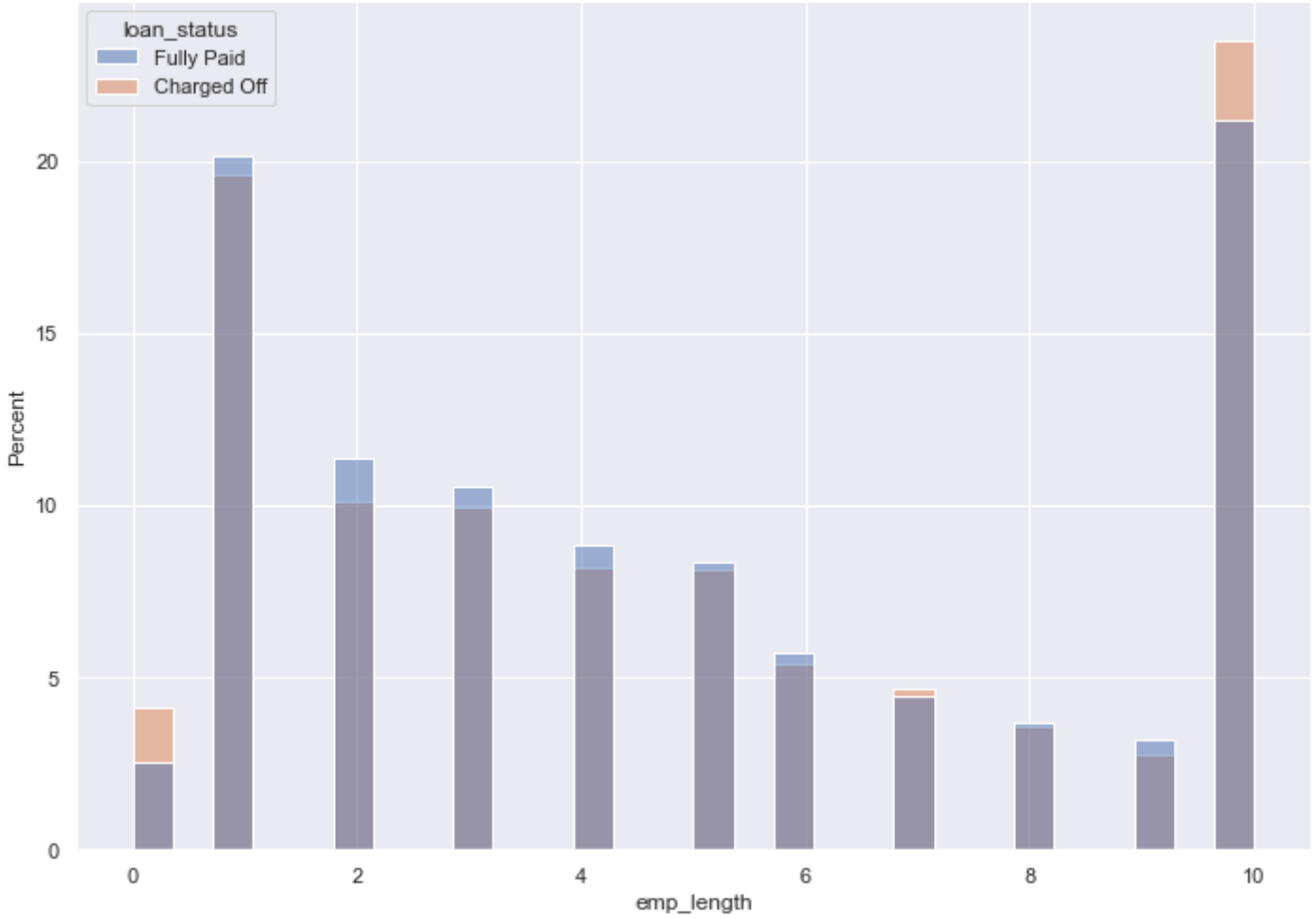

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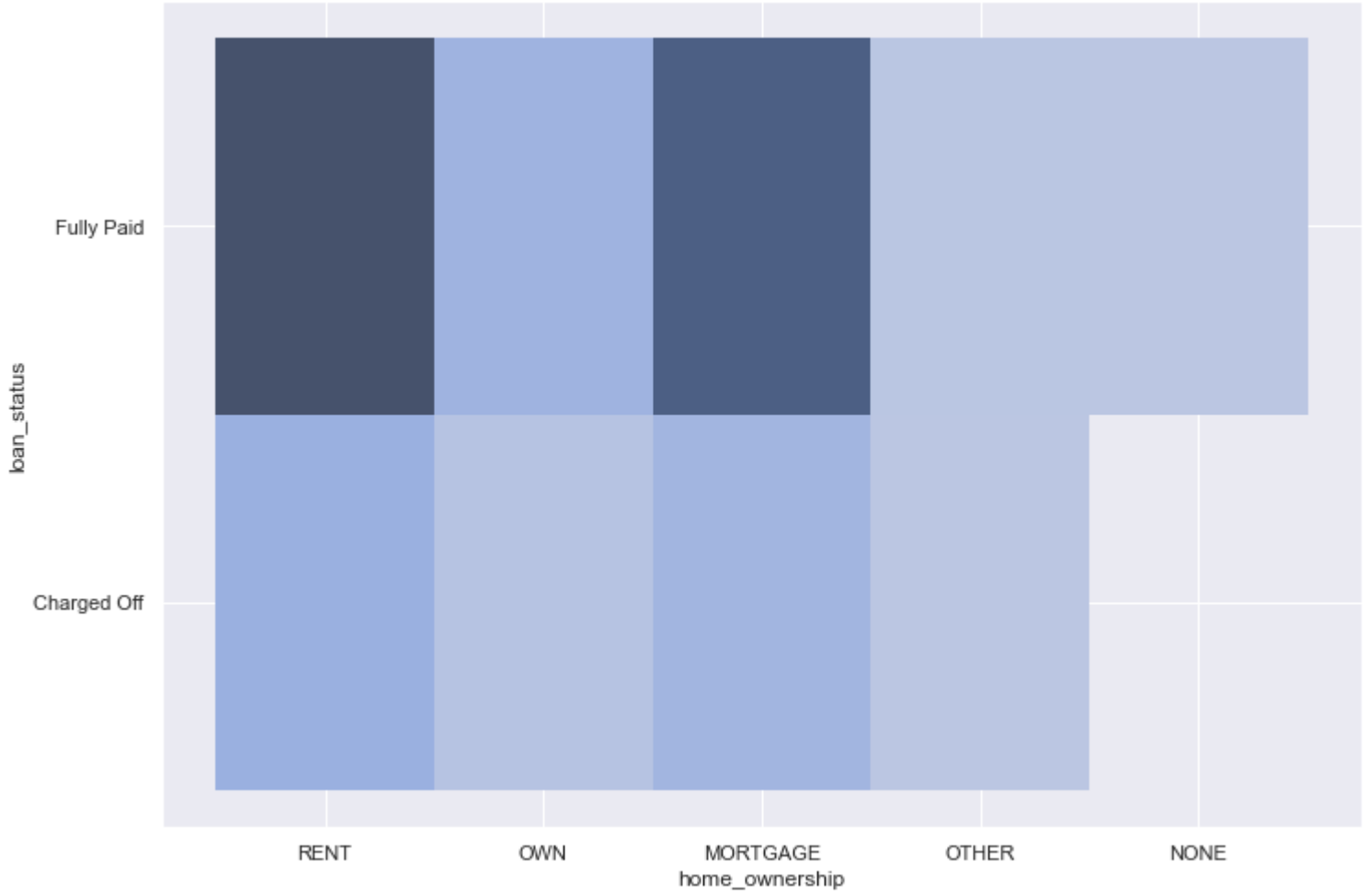

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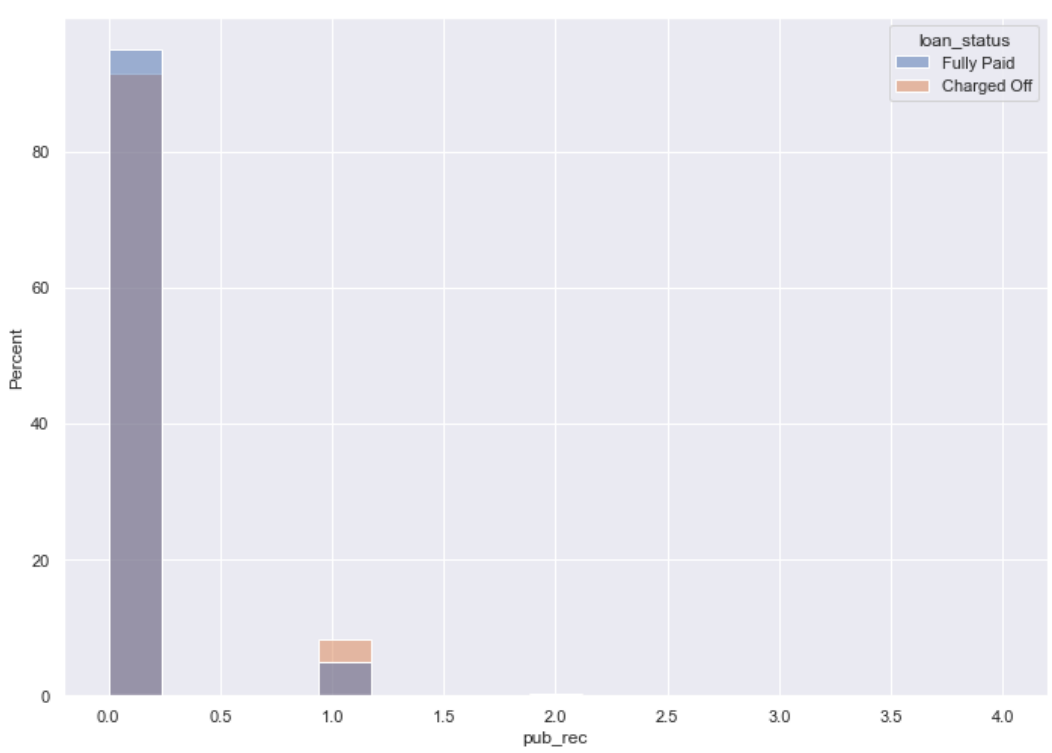

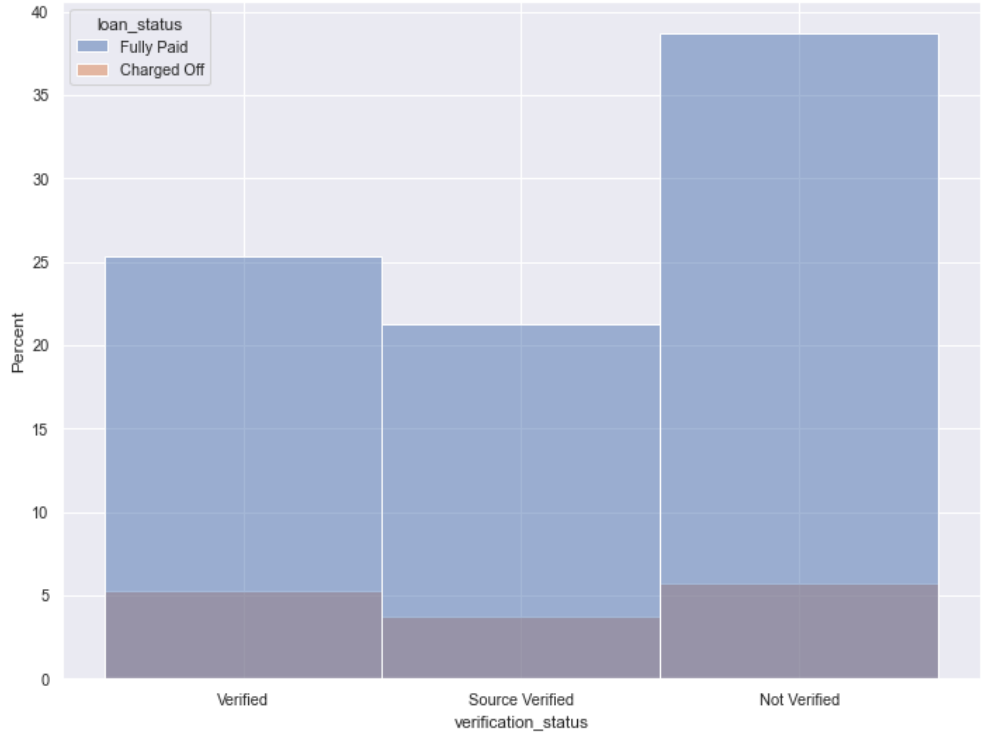

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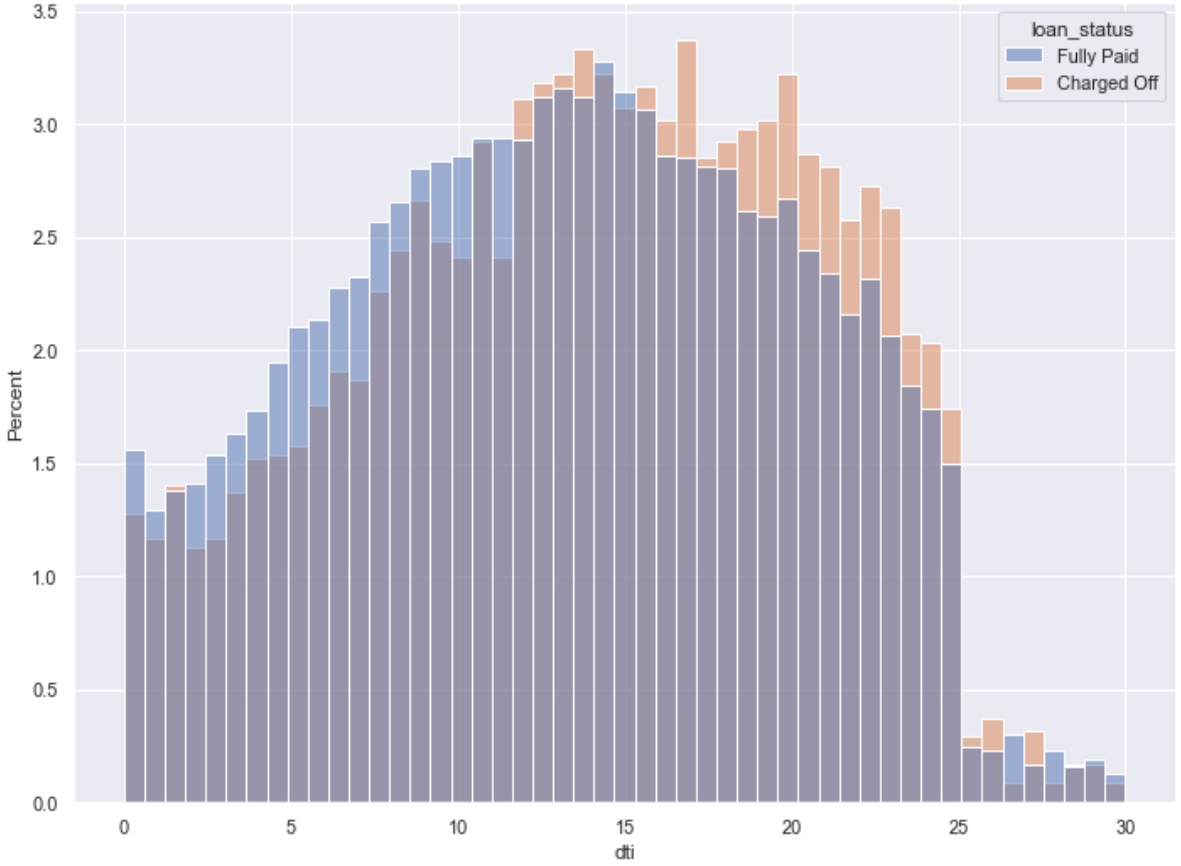

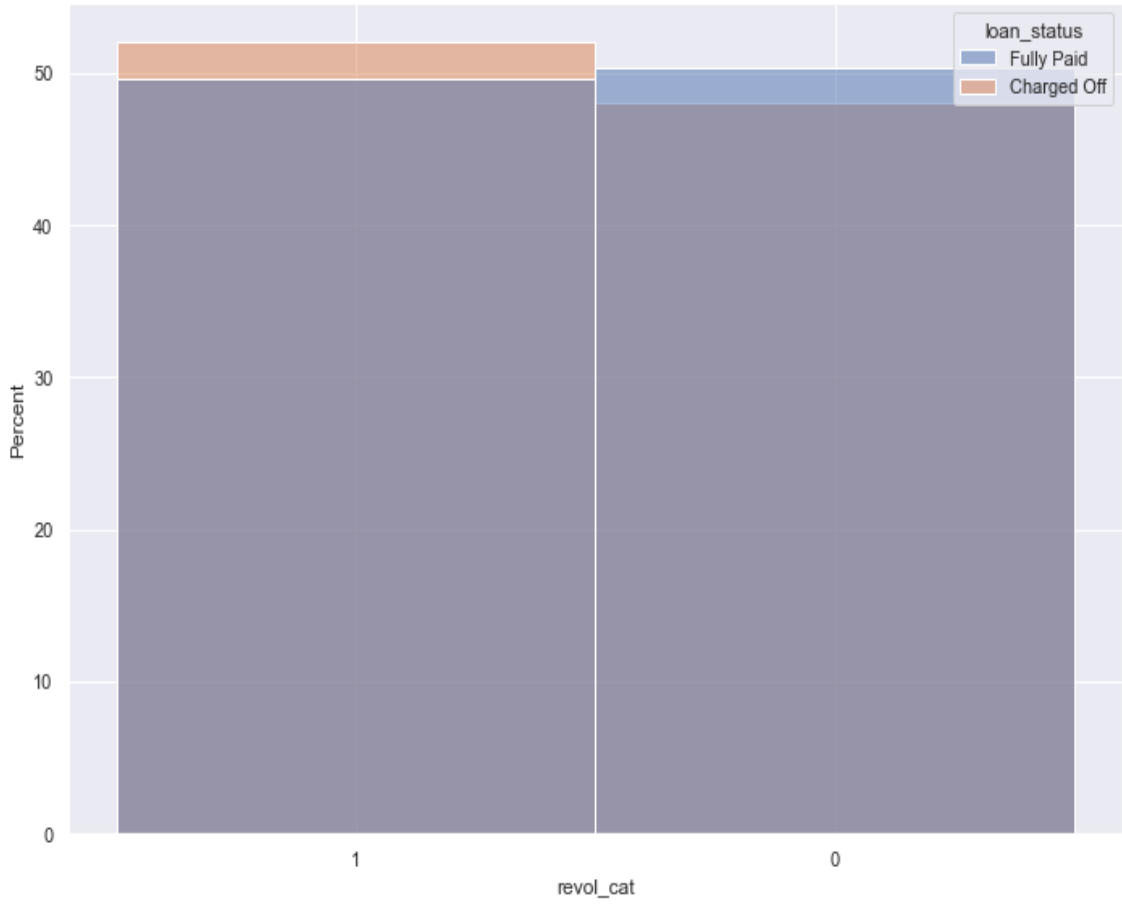

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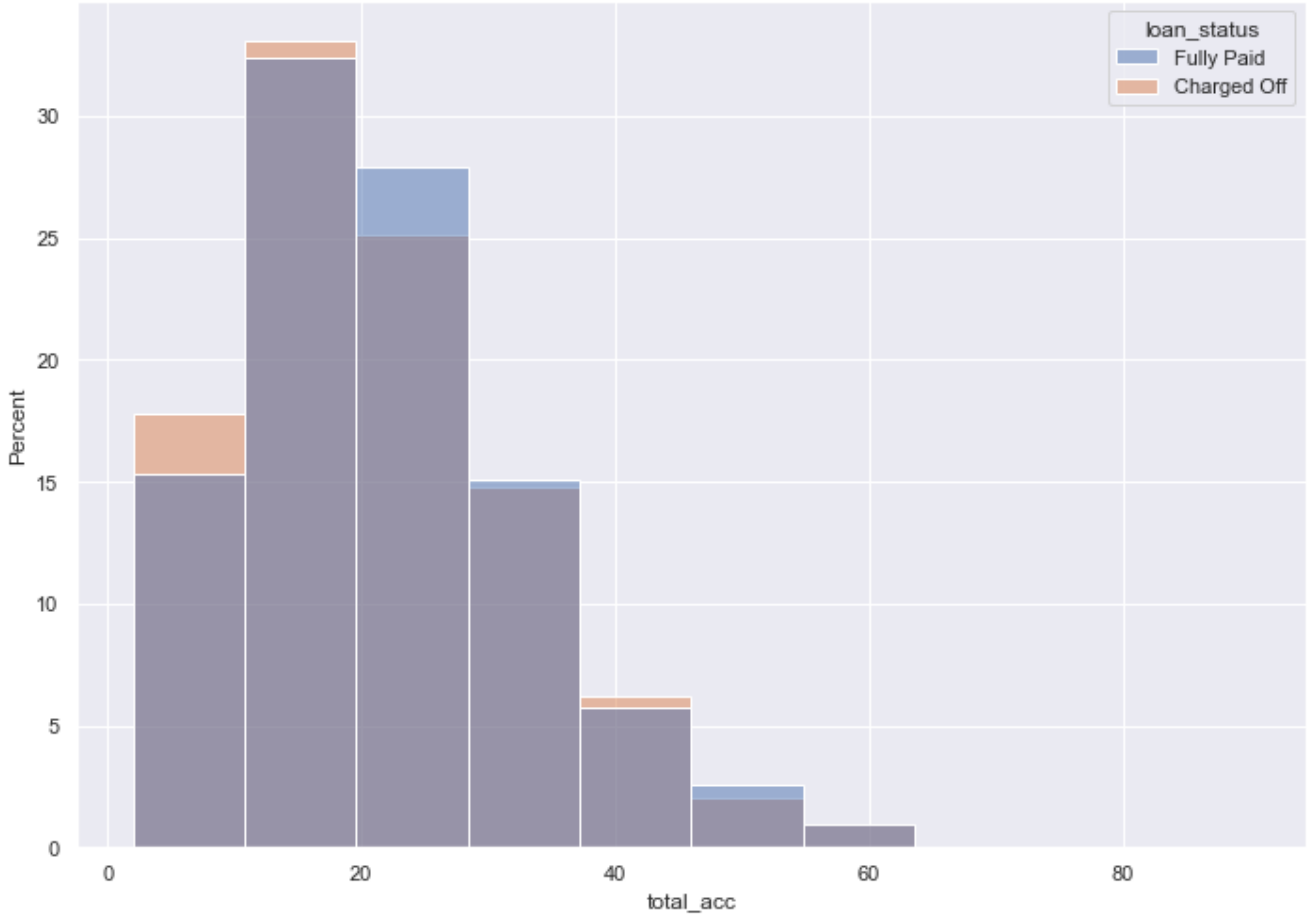
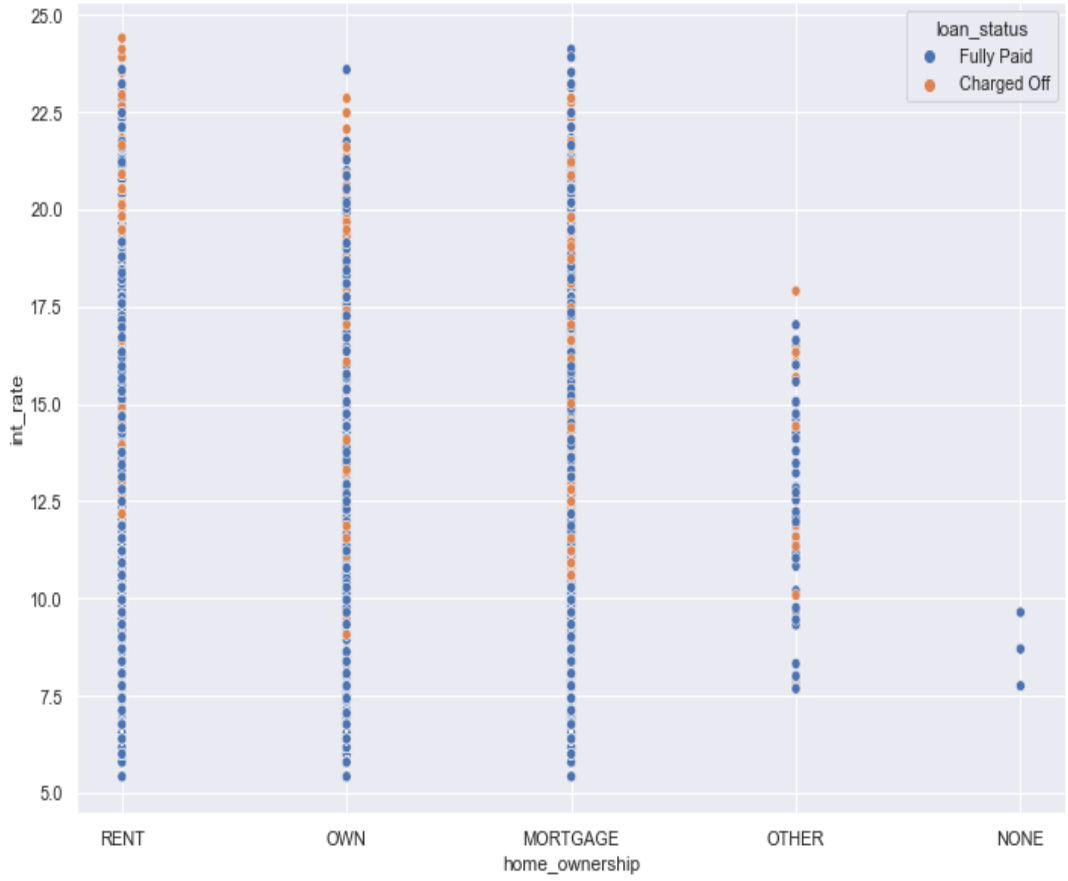
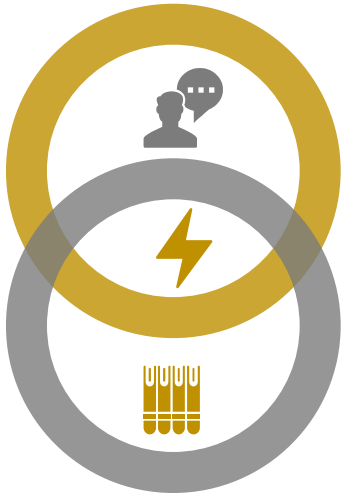




RECOMMENDATION



- So for us only important factors are Fully paid and charged off for comparison
  Fully paid : 83%
  Charged off : 14.2%
- It is clear that as sub grade decreases, then the chances of loan getting charged off increases.
  Lending club should examine more information from borrowers before issuing loans to Low grade (G to A)
- This endorses the previous assumption for home ownership, that having loan adds to liability, which the user with higher int rate doesn't able to pay his loan back and does gets Charged OFF
- Only for 0 experience the charged off percentage is more than 20, for the rest it is increasing slowly with experience (maybe as less experience people are bachelors thus less responsibility, and more experience are with family)
- Lending club should reduce the high interest loans for 60 months tenure, they are prone to loan default
- Charged off tends to increase when dti increases
- lower the enquires higher are the chances of payment
- For revol_acc > 8515 i.e. the median, the charged off is higher by 5%
- Clearly shows that having total_acc between 0 and 20, increases the chances of Charged Off