



Lending Club

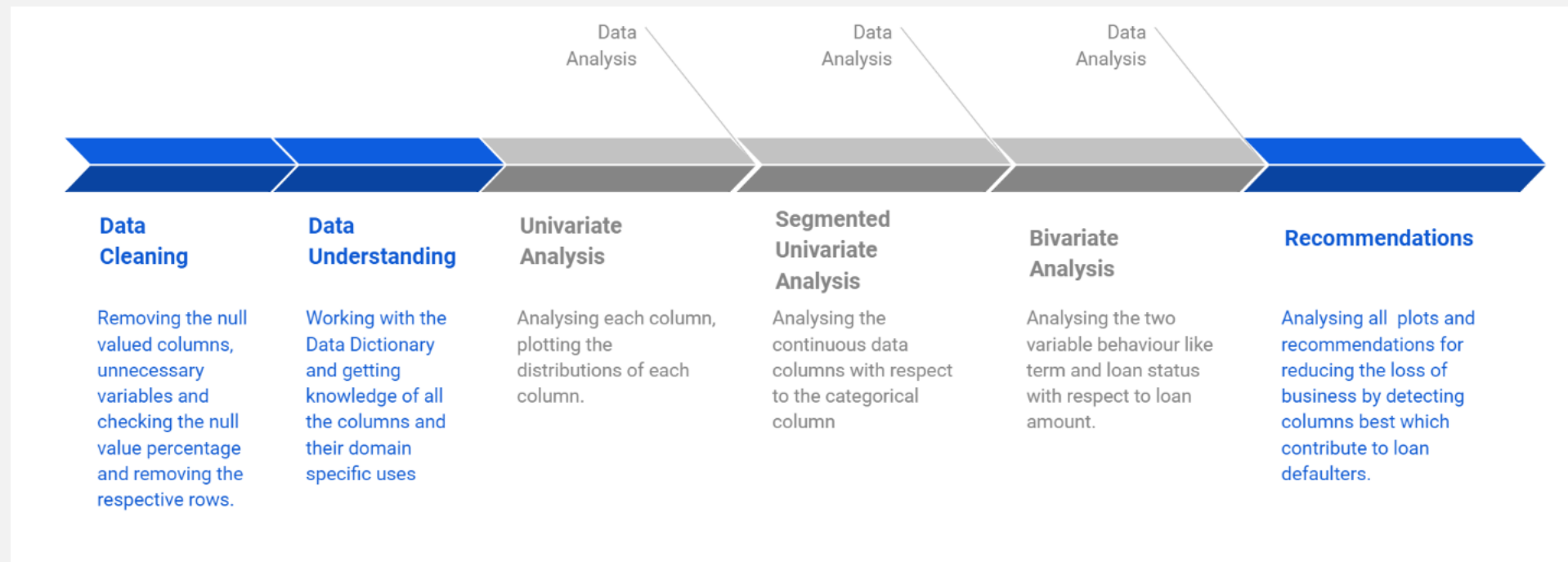
By shweta

Abstract



- Lending club is an online marketplace, facilitating personal loans, business loans, and financing of medical procedures.
- Borrowers can easily access lower interest rate loans through online interface.
- The objective of analysis is to use the information of past loan applicants and find whether they defaulted or not.

Problem solving methodology



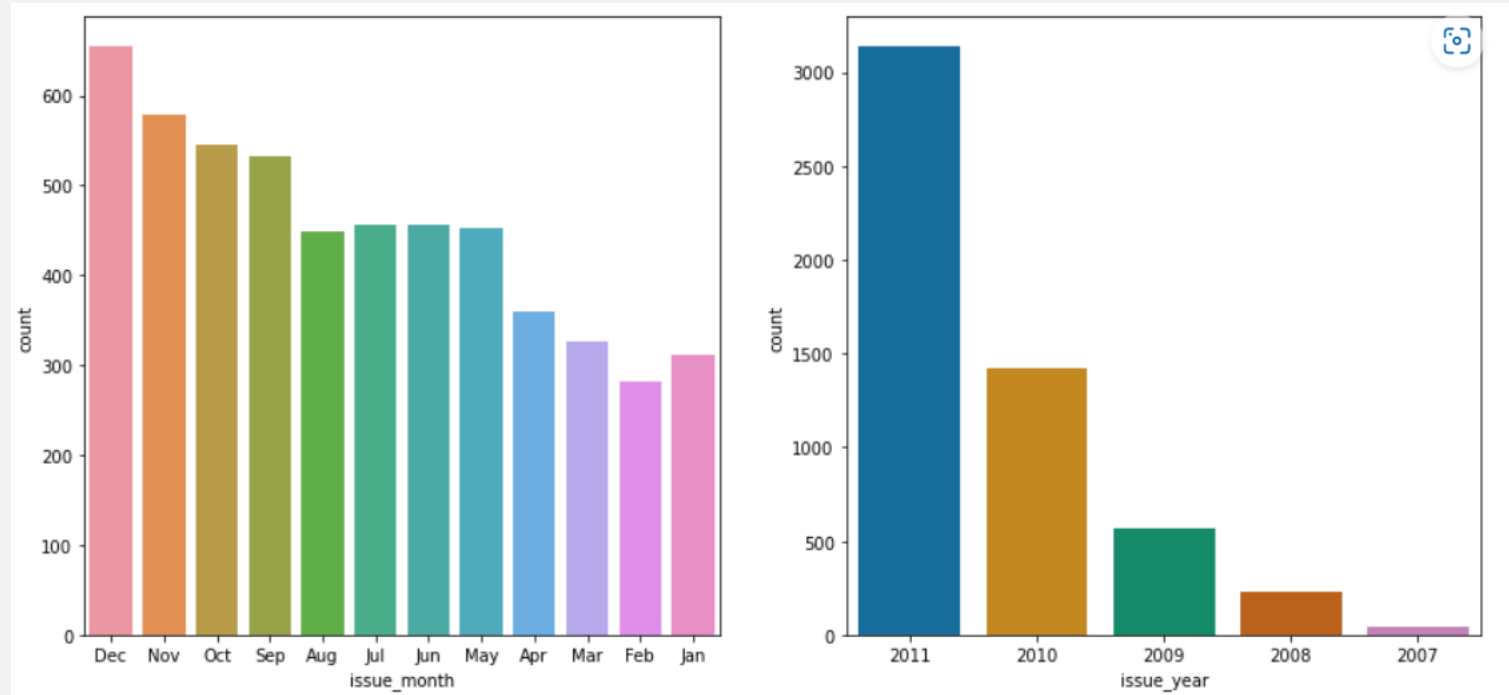


ANALYSIS

Let's dive in

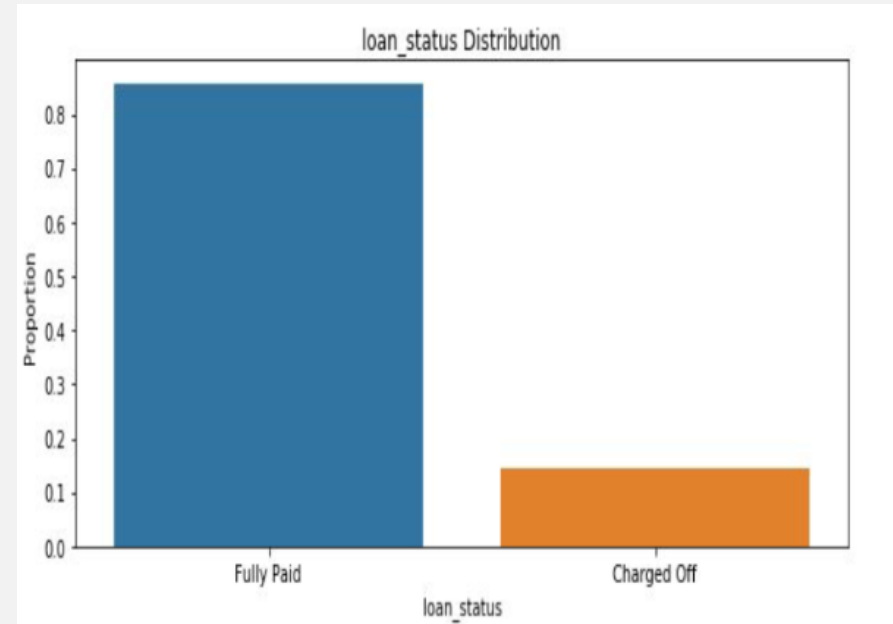
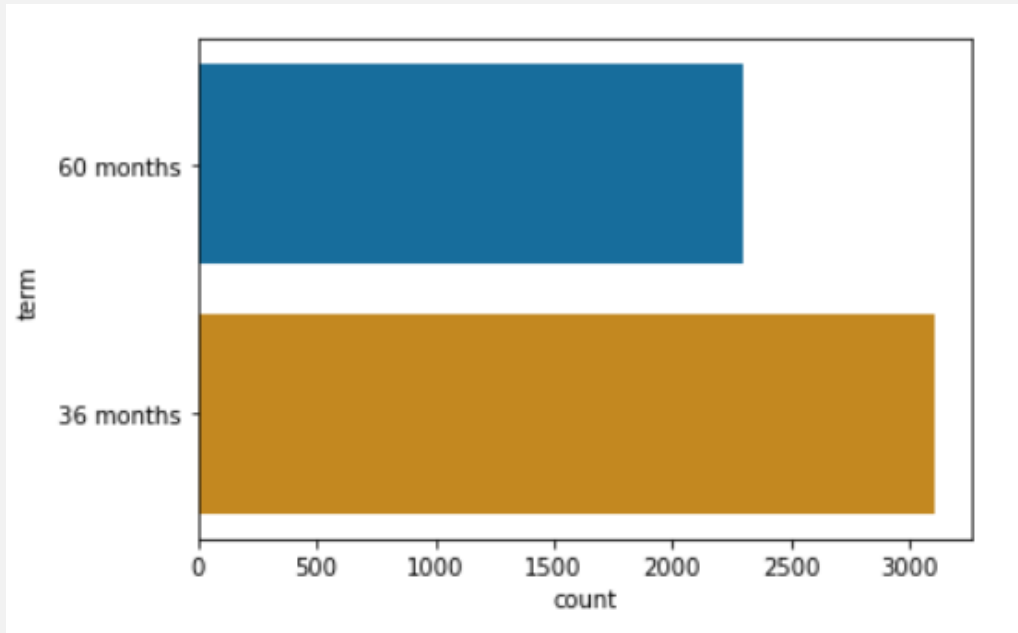


Growth of Lending Club



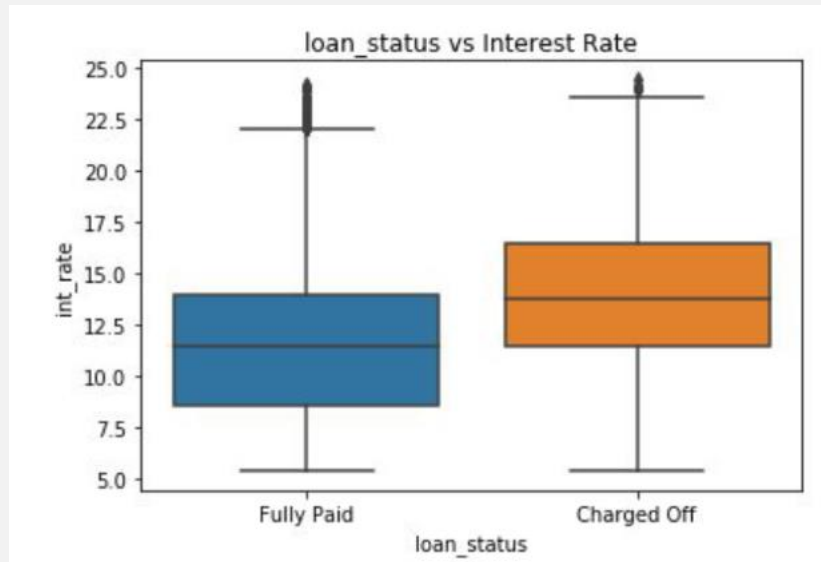
- Lending club has really expanded year by year, the no. of loans issued are doubled every year.
- In the final quarter of year there are more loans issued this could be because of vacations.

Term and loan status



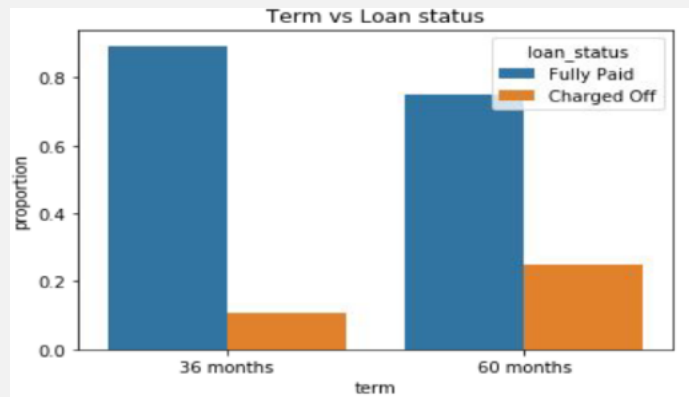
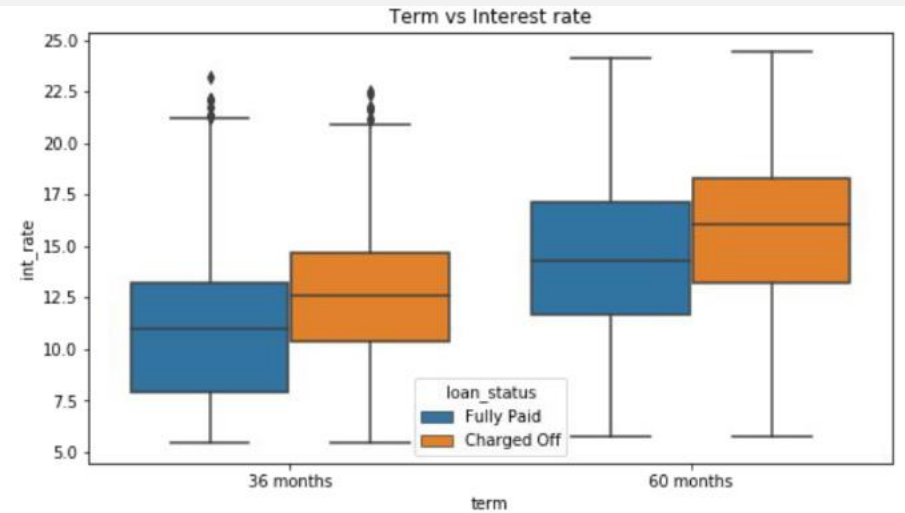
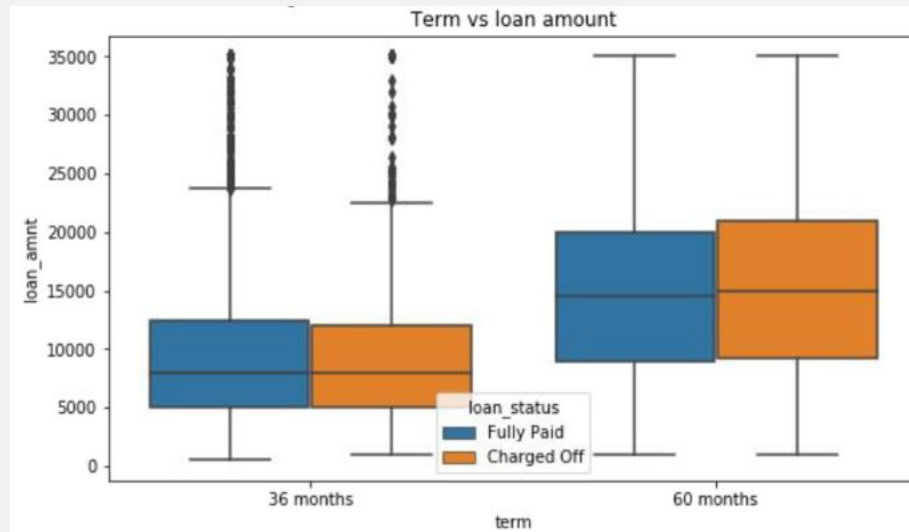
- There are only two loan terms 36 and 60 months. Around 75% borrowers took loan for 36 months.
- The charged off borrowers are around 15% and fully paid is around 85%.

Loan status and Interest rate



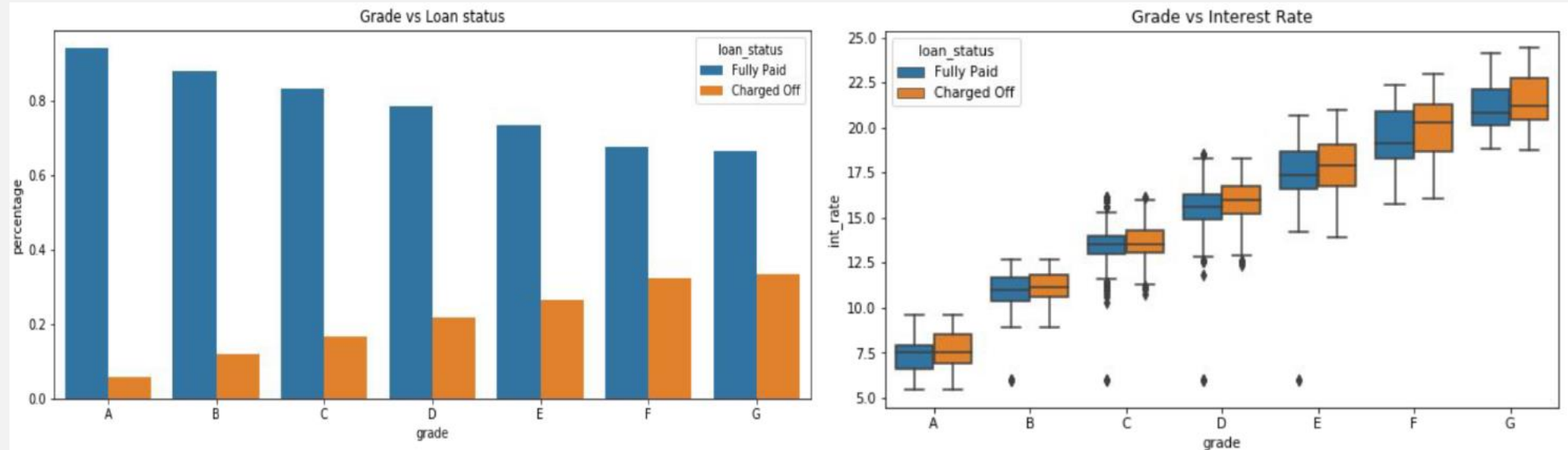
- When the interest rate is higher there is chance of defaulters.

Analysis



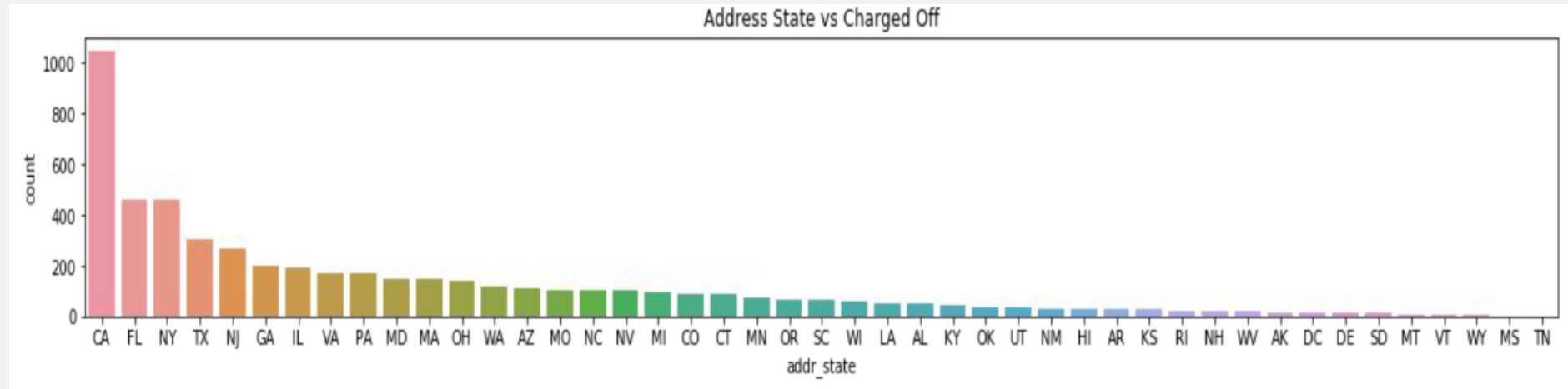
- The default rate is higher in 60 months tenure because most people took high loan amount with high interest rate in it and they faced difficulties in returning the sum to bank

Team



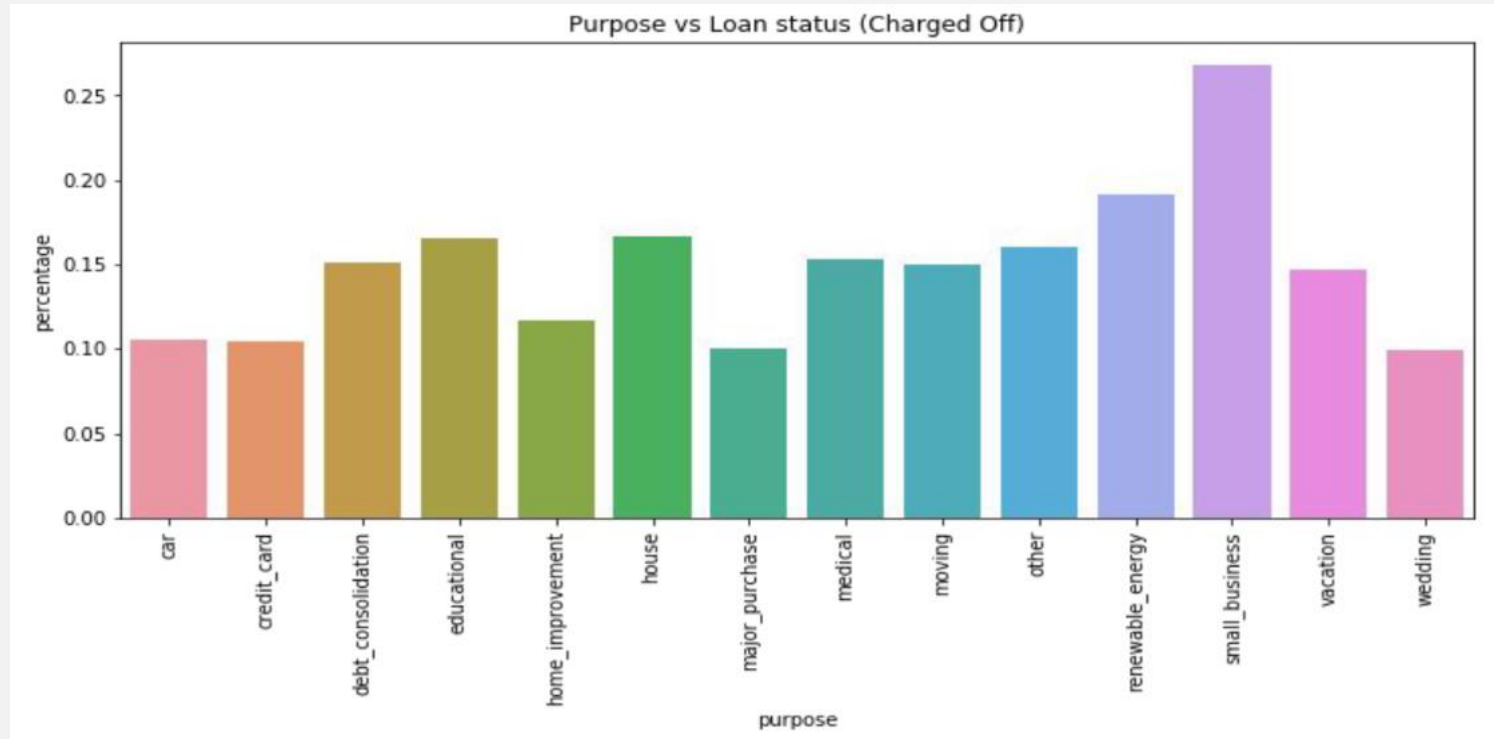
- Grades are very good category to tell the borrower probability of defaulting the loan.
- The lower grades(E,F,G) have higher chances of defaulting the loan than higher ones(A,B)
- The lower grades are getting loans for higher interest rates which might be cause for loan default.

States and charged off



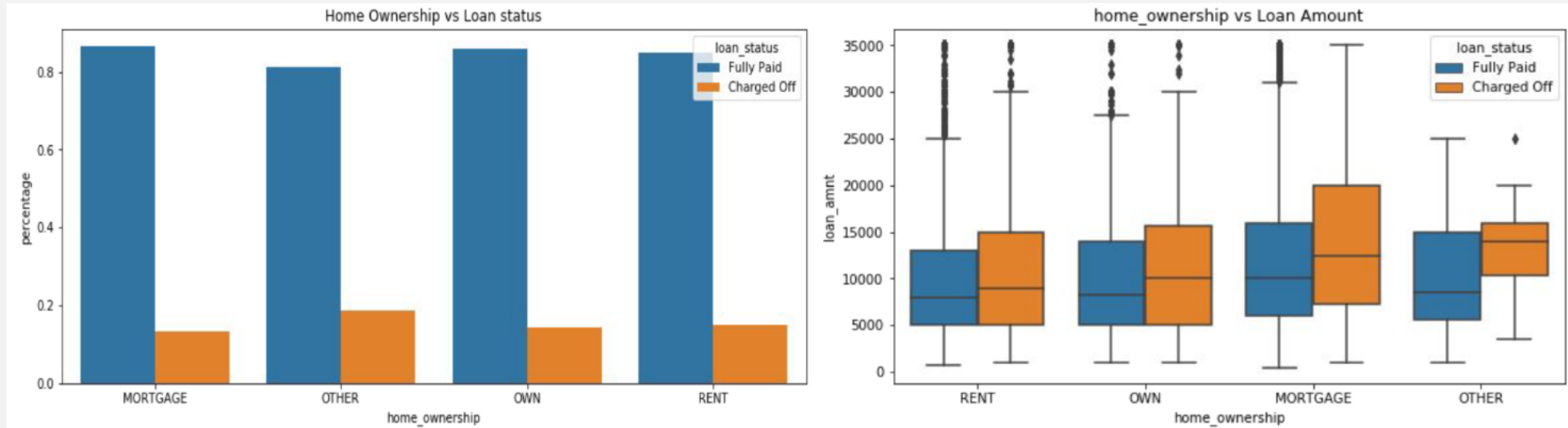
- CA, FL, NY, TX and NJ states have most defaulters.

Purpose and loan status



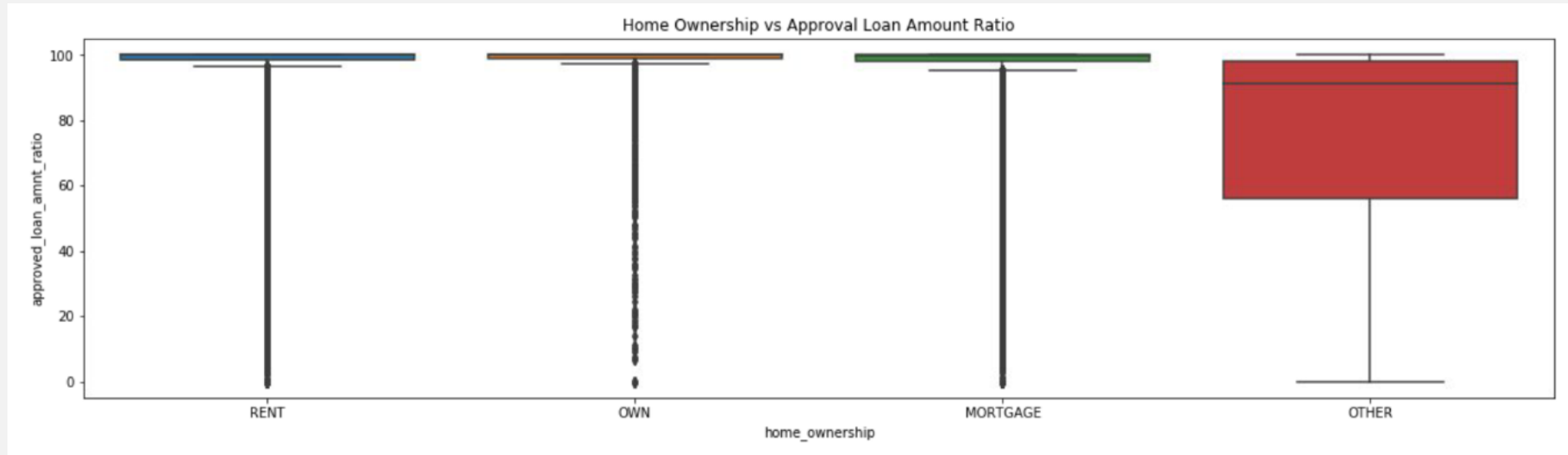
- Borrowers who took loan for small business have high defaulters.

Home owner and loan



- There is around 20% chance of loan default in each home ownership category.
- From the 2nd plot we can see the people with higher loan amounts in mortgage home ownership has high default rate than others.

Approved loan



- Approved loan is less than the requested loan amount by borrowers for other home ownership category.

Conclusion

- Lending club should reduce the high interest loans for 60 months tenure, they are prone to loan defaults.
- Grades are good metric for detecting defaulters. Lending club should examine more information from borrowers before issuing loans to low grade (G to A).
- Limiting the issued loans in states like CA, FL, NY to make profit.
- Small business loans are defaulted more. So, minimize loans for them.
- Borrowers with mortgage home ownership are taking higher loans and defaulting. When the amount is more than 12000, should not be approved for this category.

