

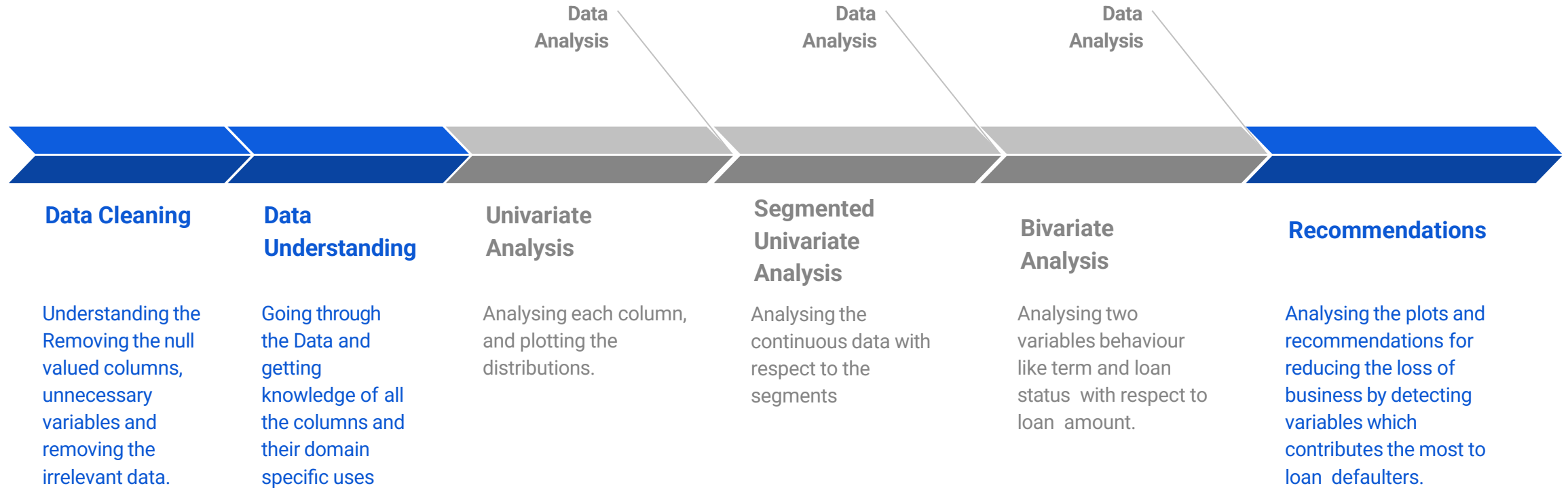
# Lending Club Case Study

By: Pranshu Mishra

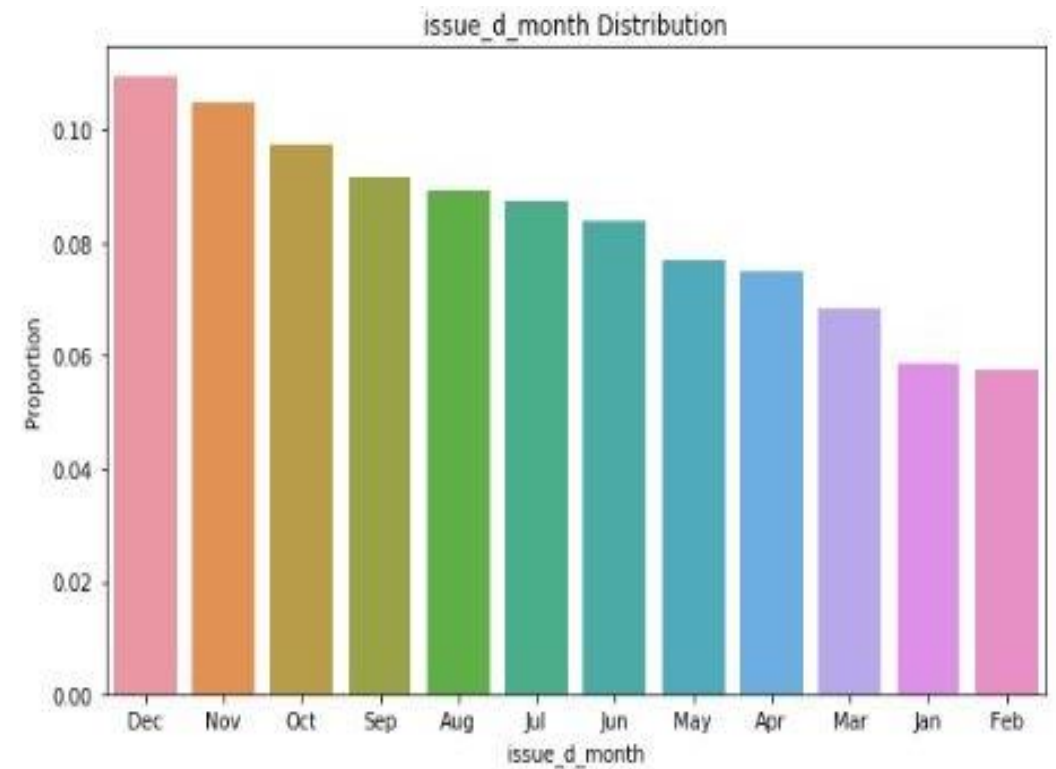
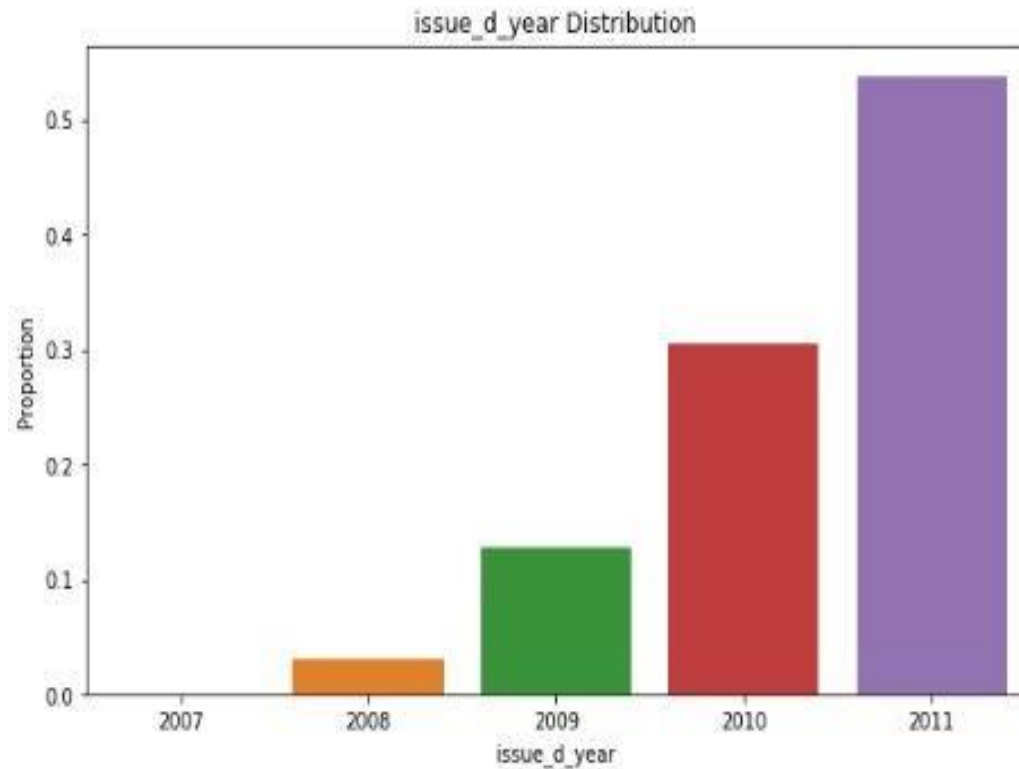
# Abstract

- This company 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.

# Methodology

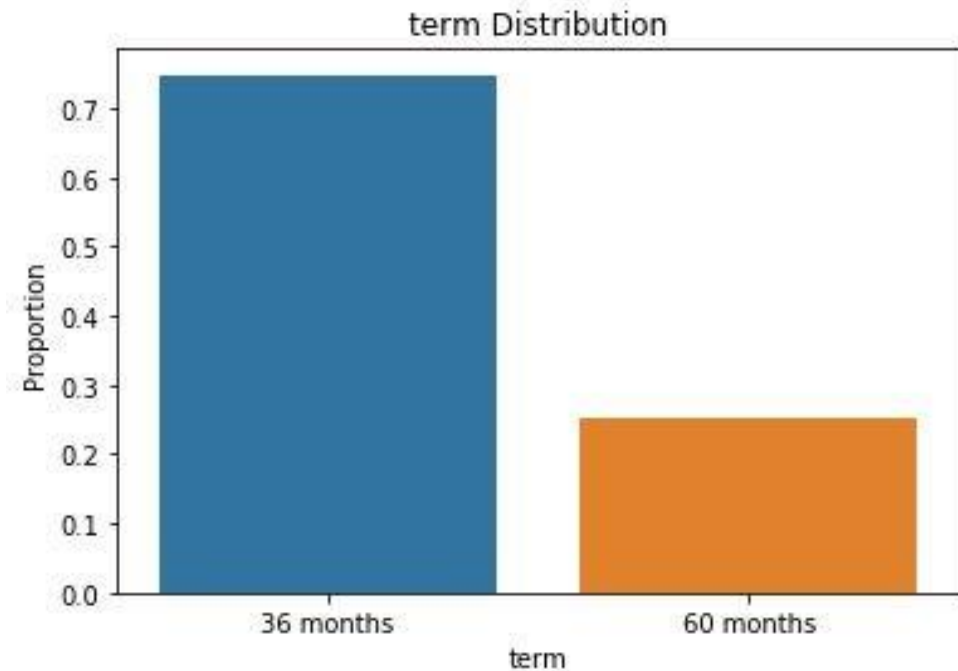
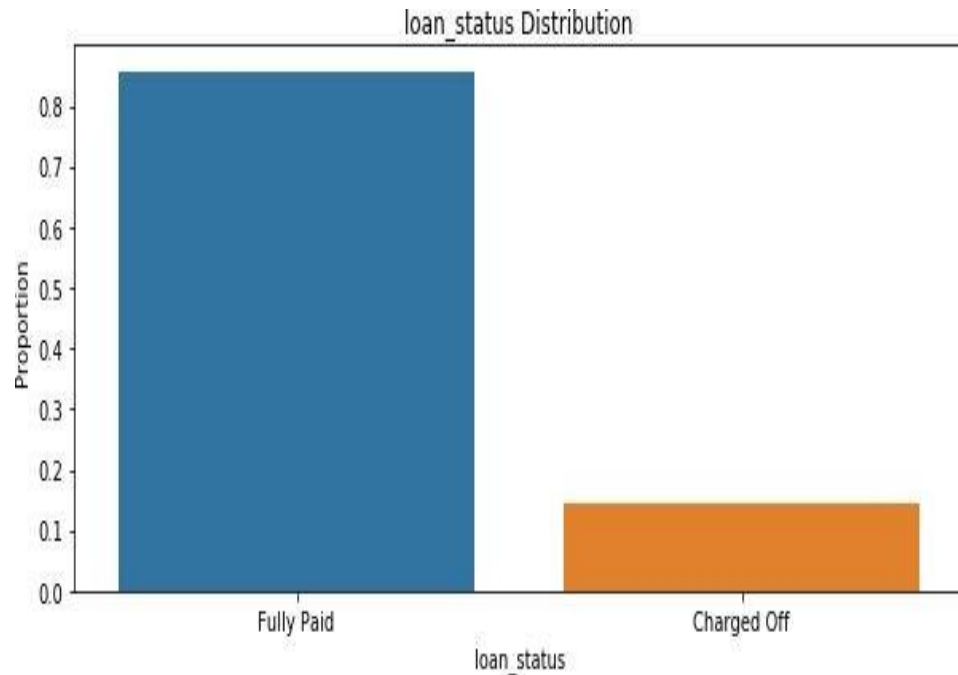


# Analysis

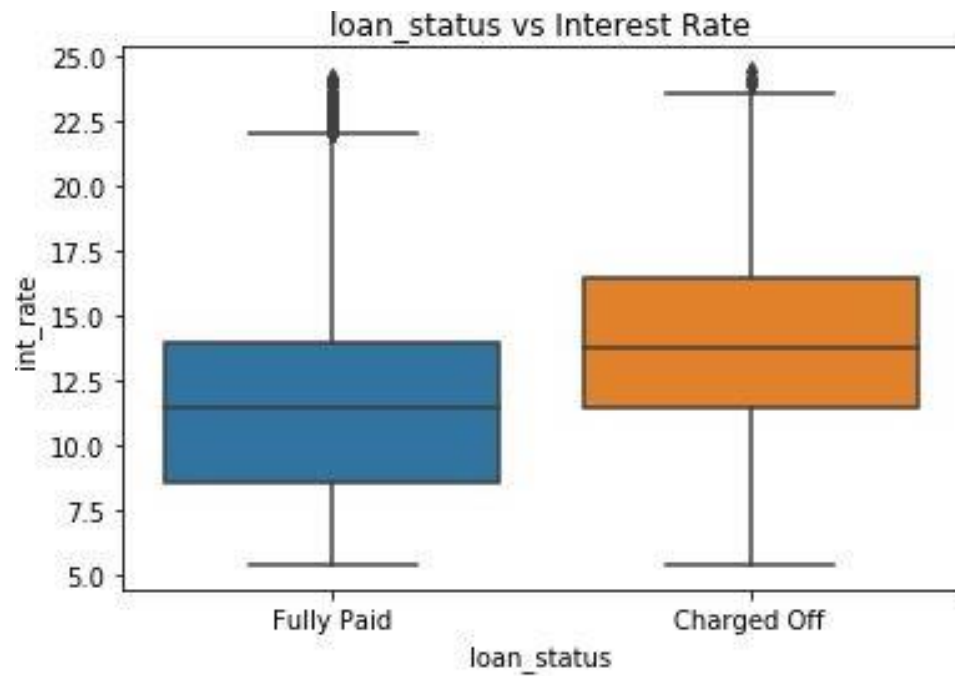


- Lending club has grown year by year, the number of loan issued are doubled every year.
- Also the issued month of loans is also increasing from January to December. In the final quarter of year there are more loans issued this could be because of vacation and christmas.

# Analysis

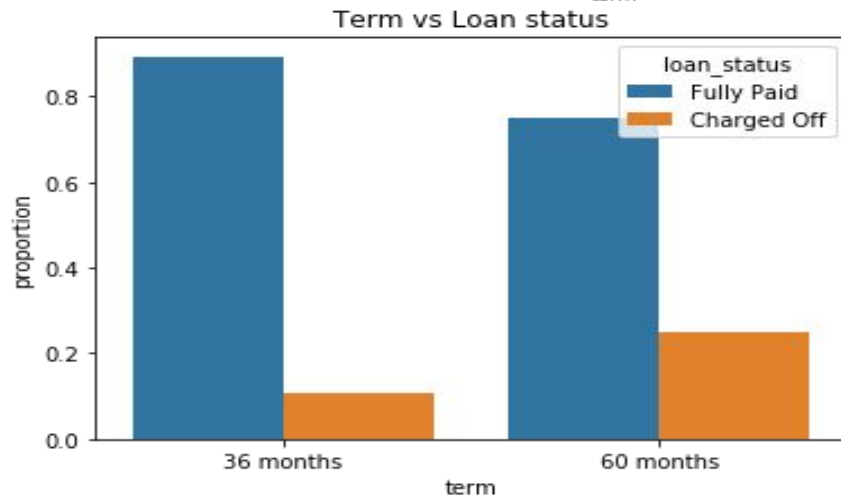
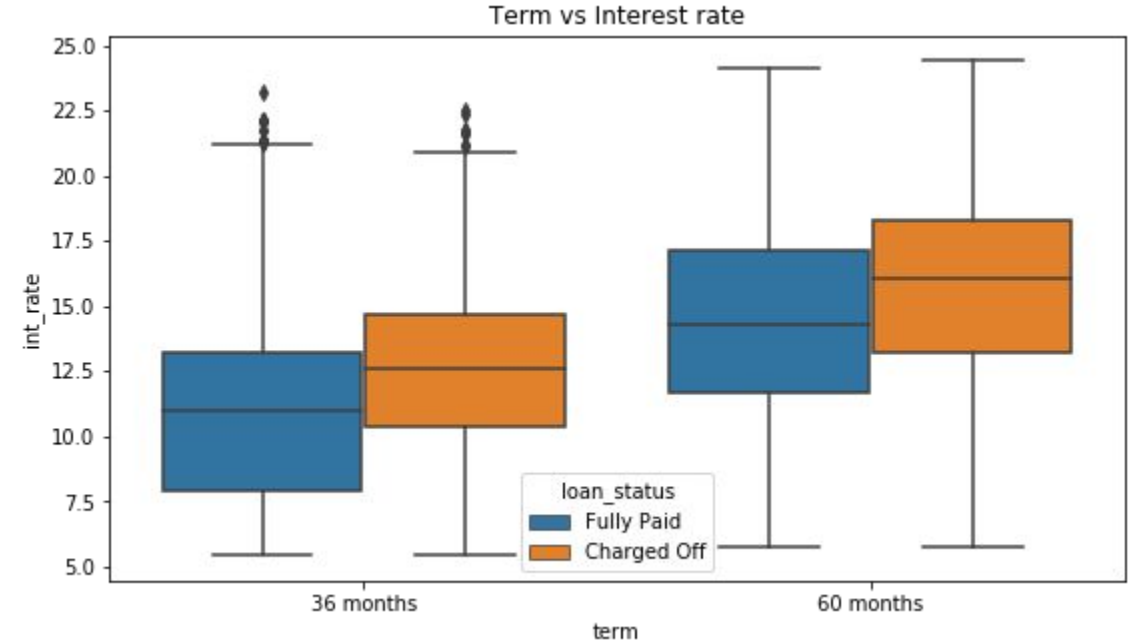
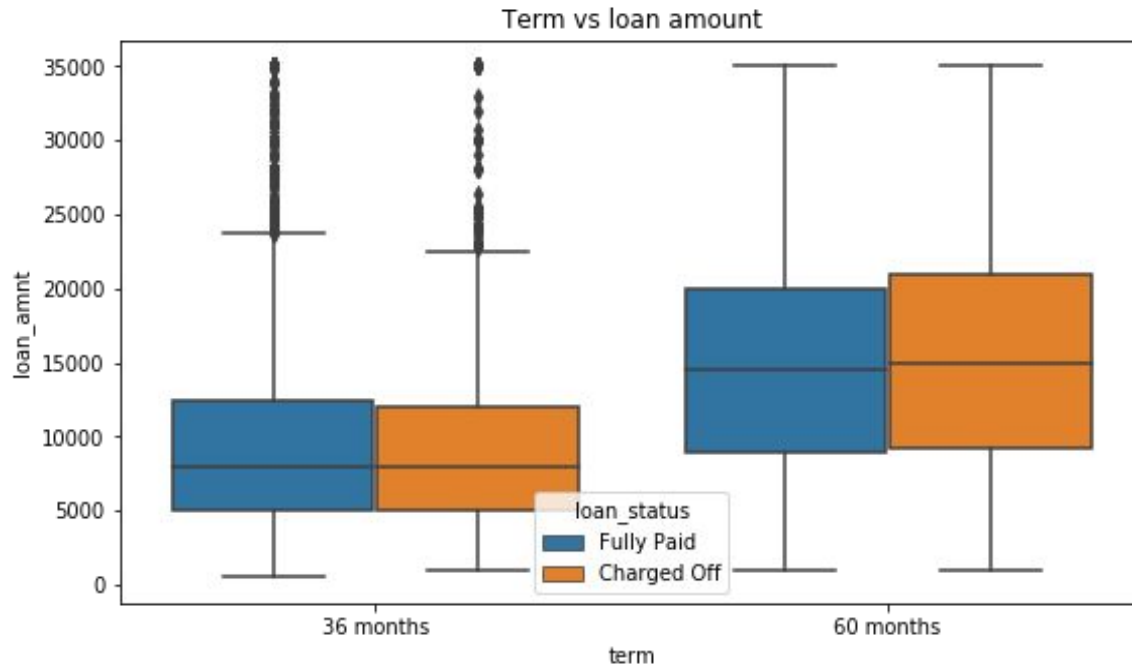


- There are only two loan terms 36 and 60 months. Most borrowers took loans with 36 months term.
- The charged off borrowers are around 15% and fully paid is around 85% in the given data set.



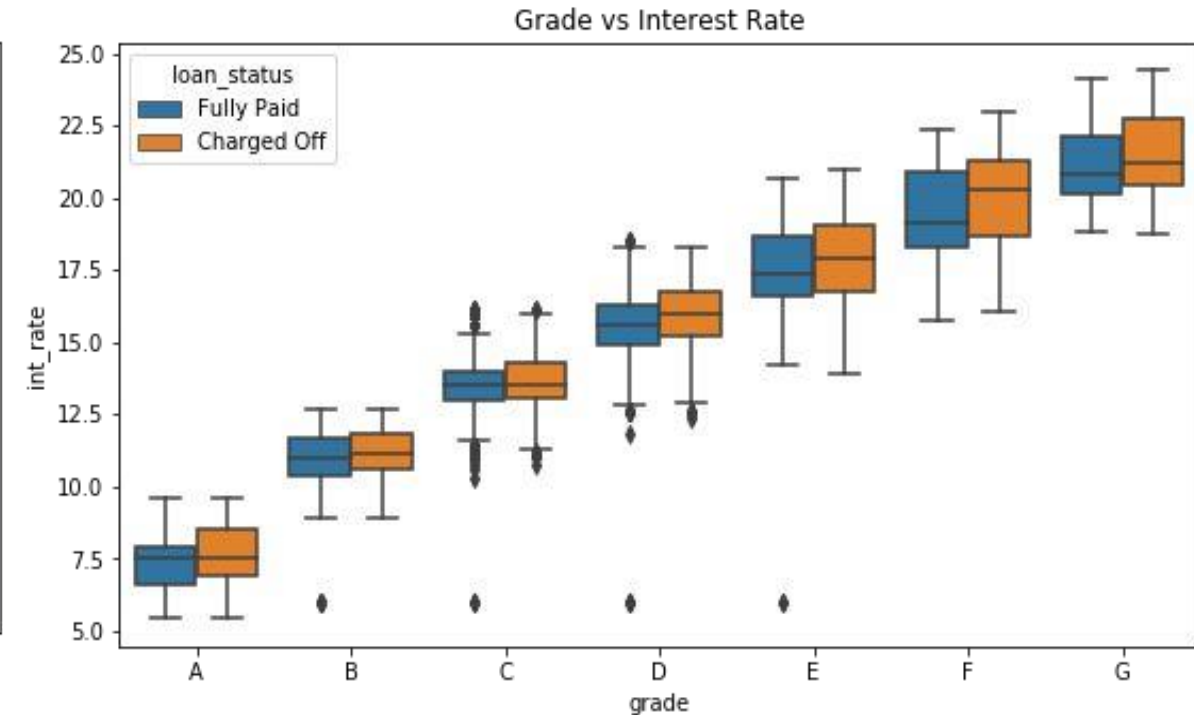
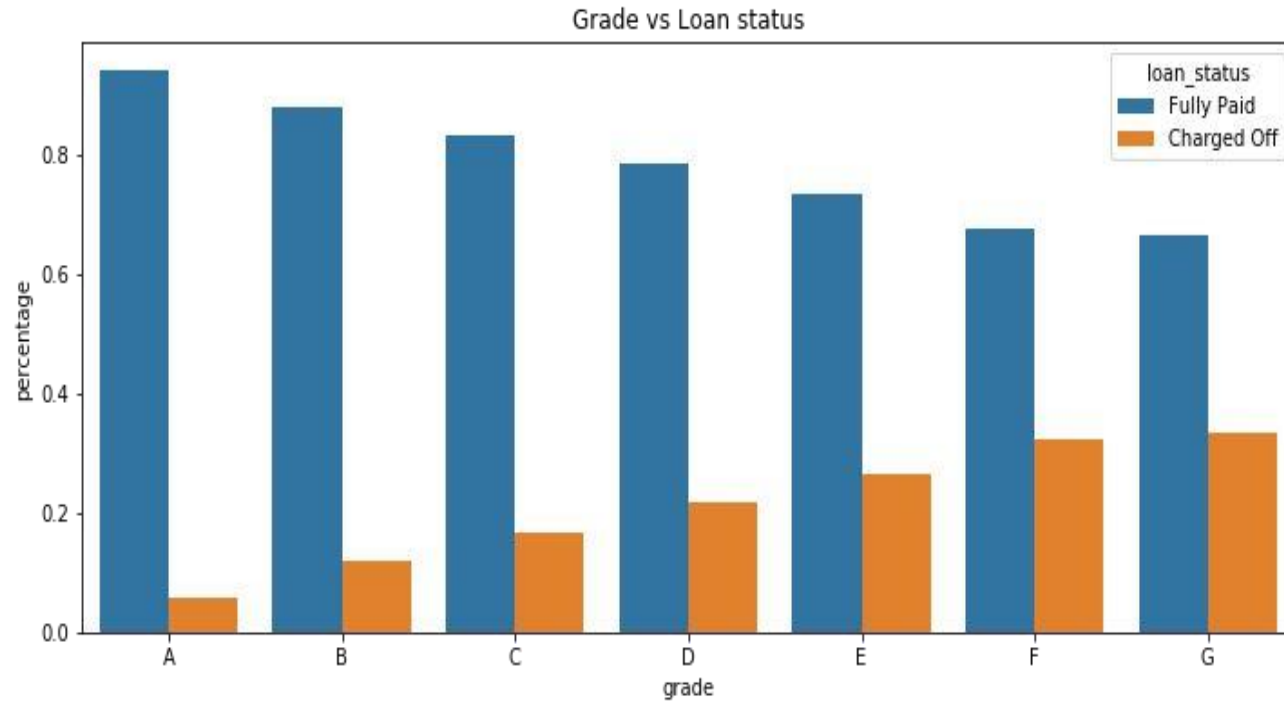
- When the loan interest rate is high there is high chance of loan getting defaulted.

# Analysis



- The default rate is high 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.

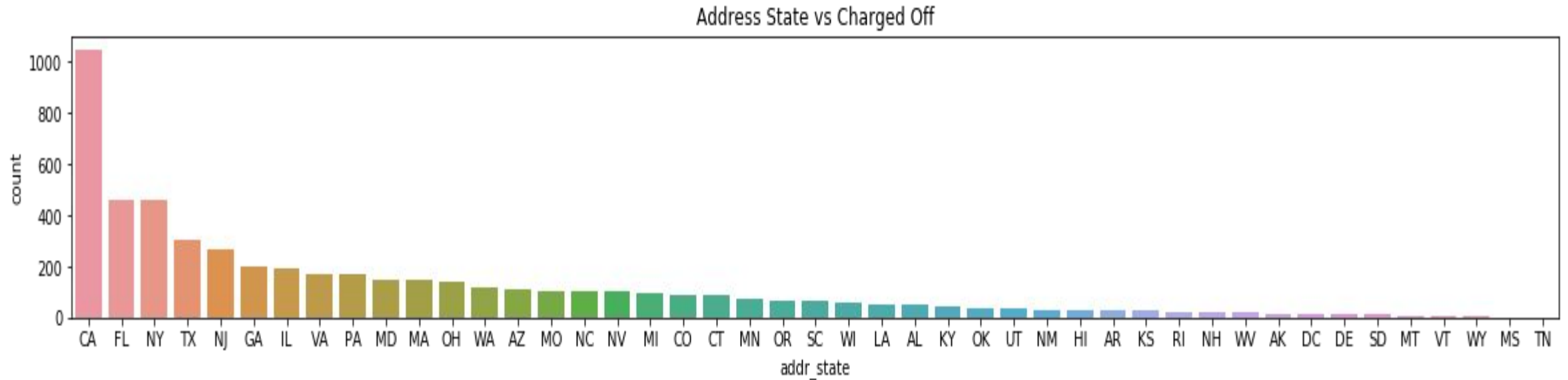
# Analysis



- 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)
- Also the Lower grades are getting loans for higher interest rates which might be the cause for loan default.

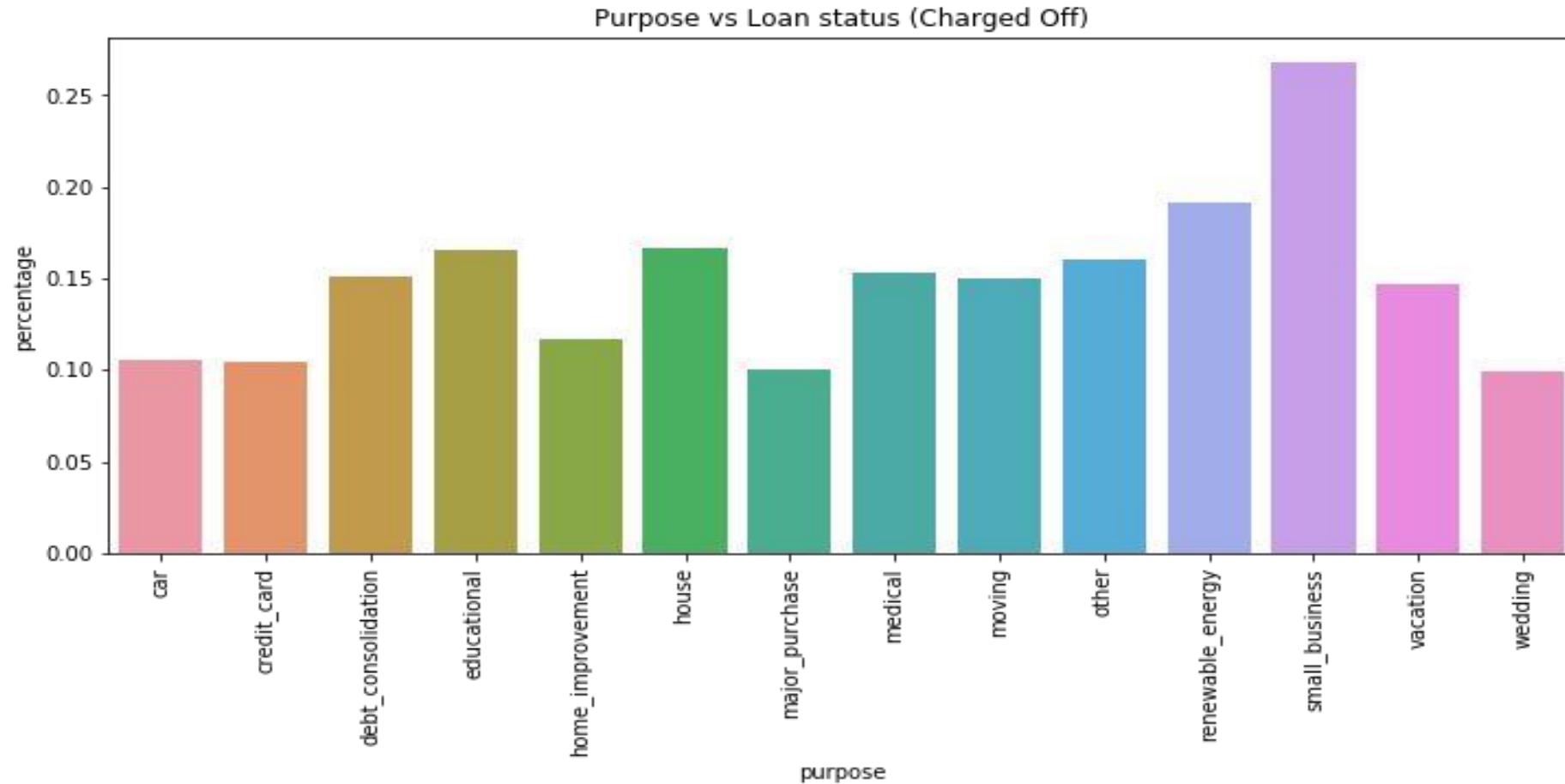


# Analysis



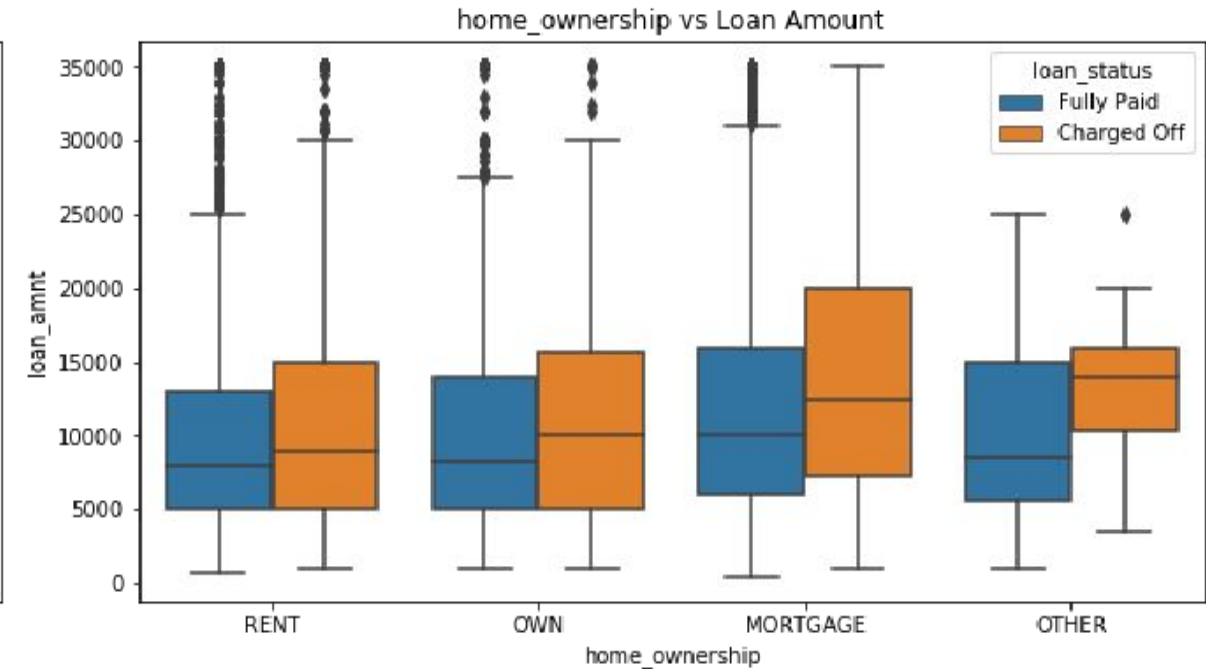
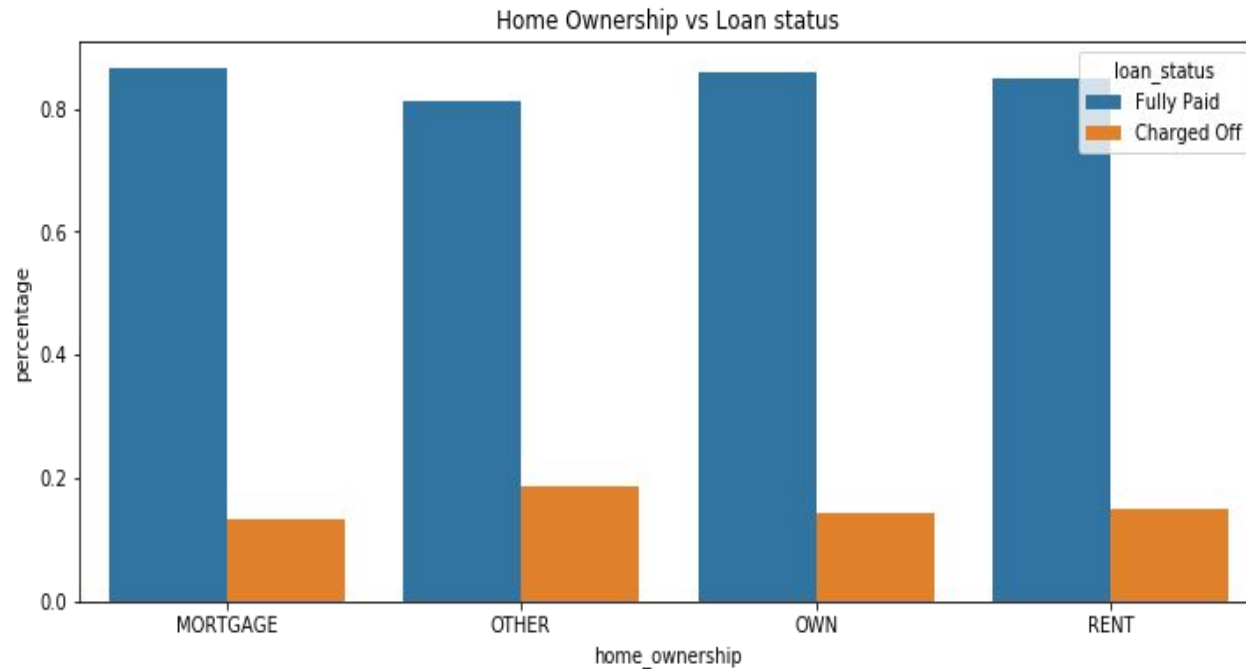
- The loans which are given for CA, FL and TX state borrower's are defaulted more than other states.

# Analysis

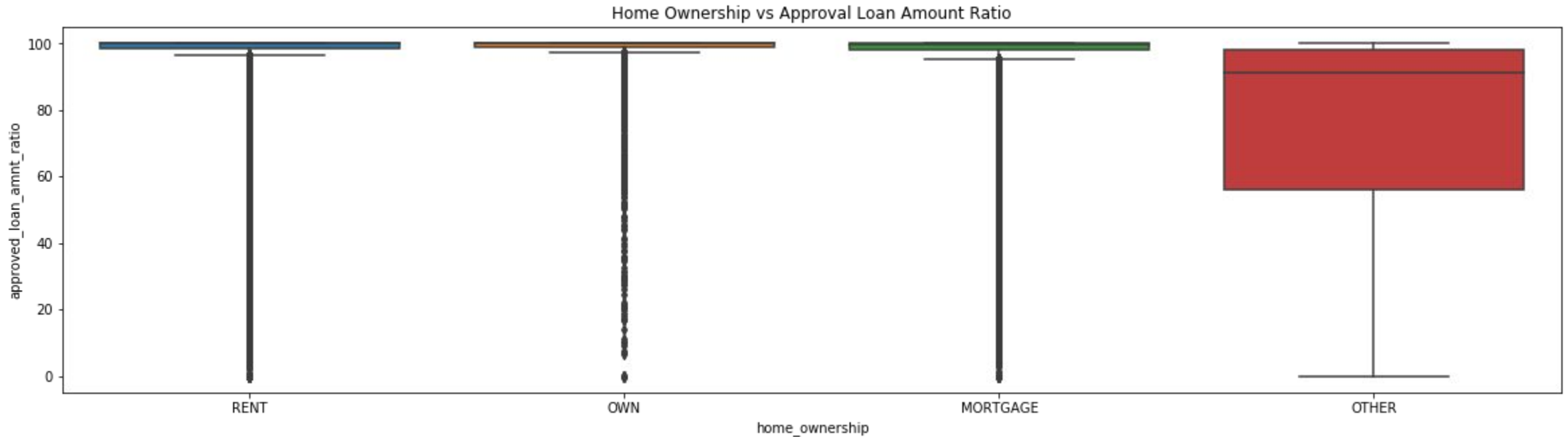


- Borrower's who took loans for small business purpose have defaulted more.

# Analysis



- 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 (Funded Amount by investor) is less than than the requested loan amount by borrowers for Other Home ownership category.

## Conclusions

- The company should think about reducing the high interest loans for 60 months tenure, they are prone to loan default.
- The company should examine more information from borrowers before issuing loans to Low grade.
- The company should control their number of loan issues to borrowers who are from CA, FL and NY.
- Small businesses defaulted more. The company should be careful while issuing the loans to them.
- The company should stop giving loans to Borrowers with mortgage home ownership when loan amount requested is more than 12000.
- The company should make sure there are no public derogatory records for borrower.