

# LENDING CLUB CASE STUDY

*Abidi Syed F Parvaiz*

# PROBLEM STATEMENT

**Lending finance company** is lending in various types of loans to urban customers. When the company receives a loan application, the company has to make a decision for loan approval based on the applicant's profile. Two **types of risks** are associated with the bank's decision:

- If the applicant is **likely to repay the loan**, then not approving the loan results in a **loss of business** to the company
- If the applicant is **not likely to repay the loan**, i.e. he/she is likely to default, then approving the loan may lead to a **financial loss** for the company

# ANALYSIS PERFORMED

Following are the steps formed for performing analysis on the given data

- Understand the data.
- Clean and manipulate the data.
- Data analysis using Univariate Analysis, Bivariate Analysis.
- Conclusion in form of visual charts.

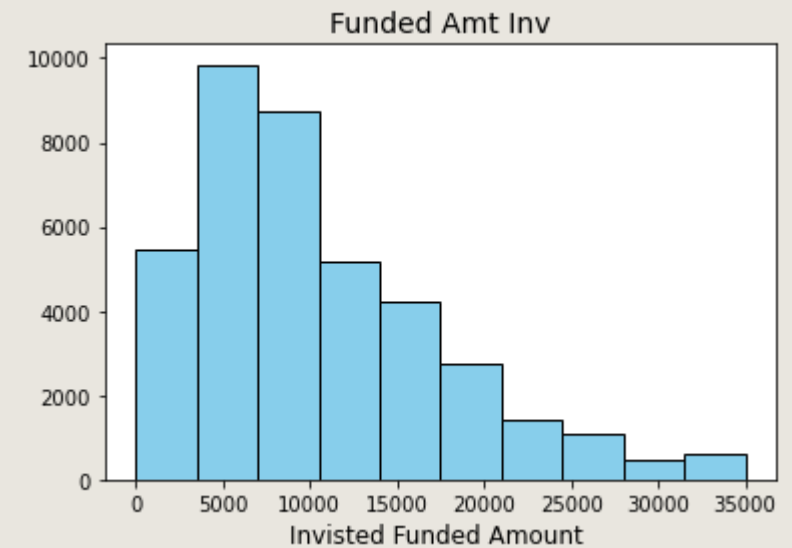
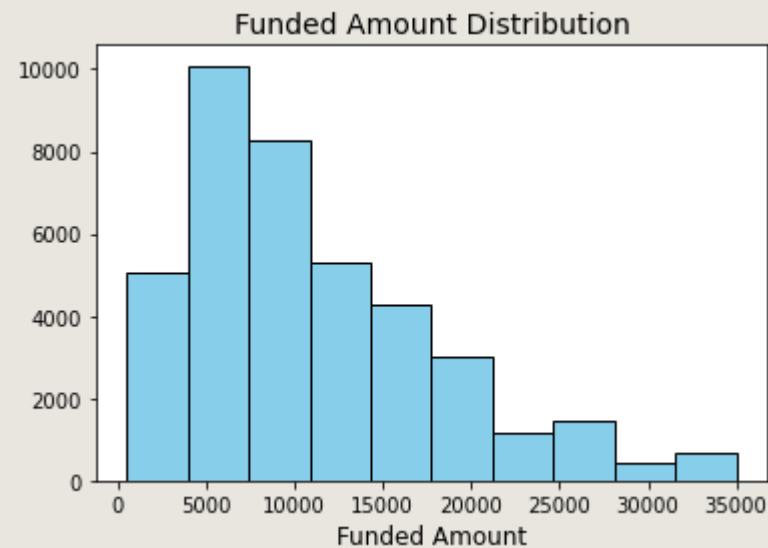
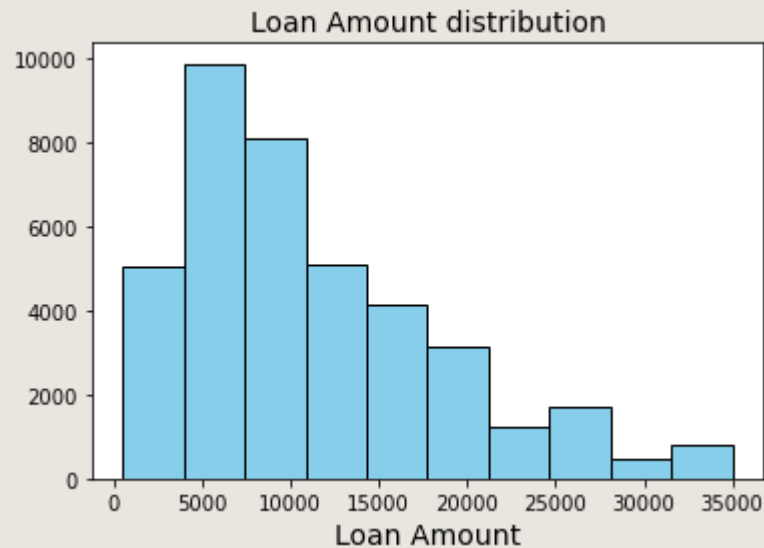
## CLEANING OF DATA

Remove duplicate data.

Remove unwanted data.

Remove Blank Entries.

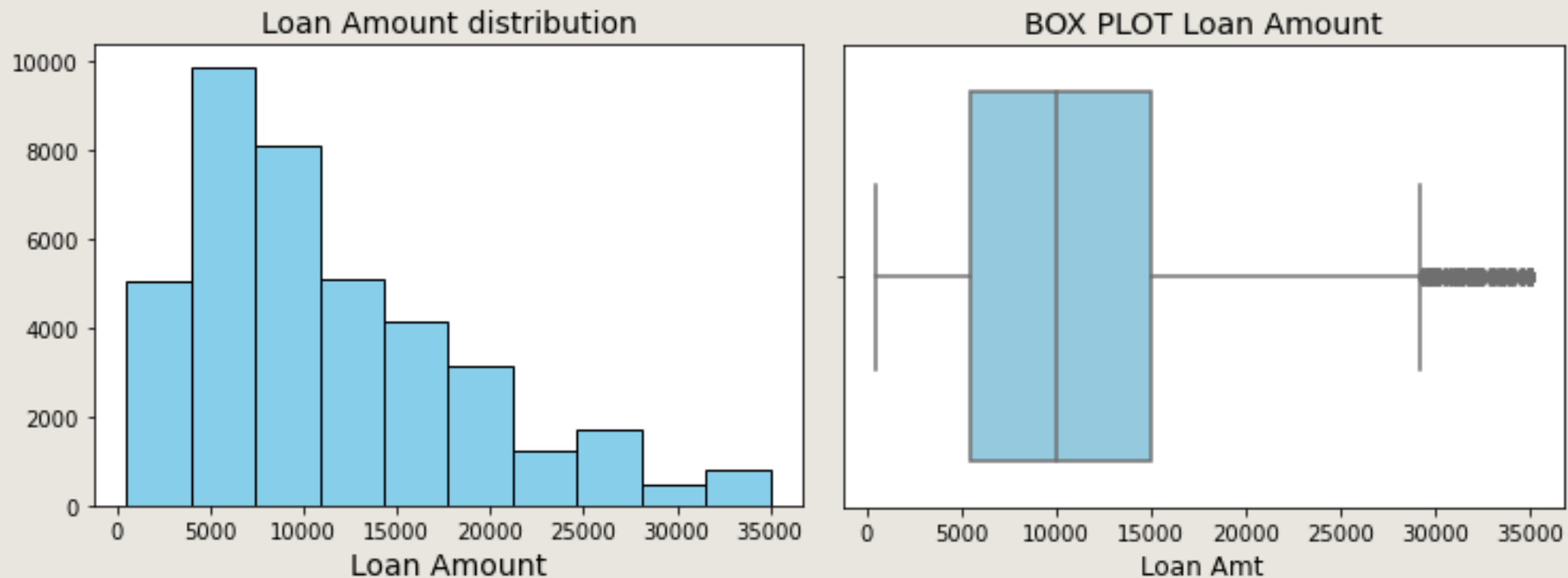
# UNIVARIATE ANALYSIS



The above trend shows Loan amount distribution, funded amount and investor funded amount is same.

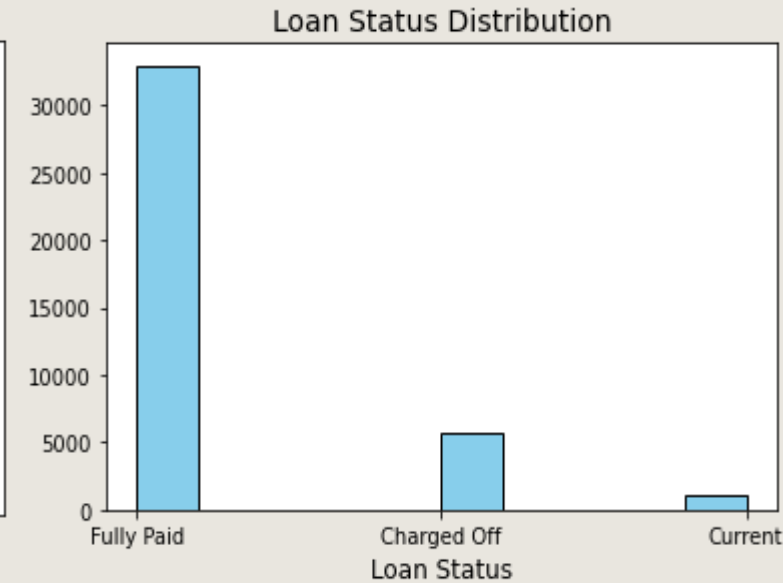
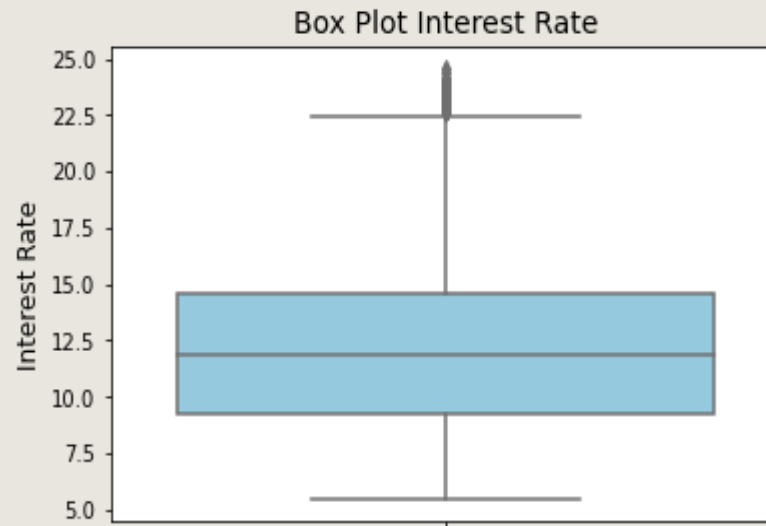
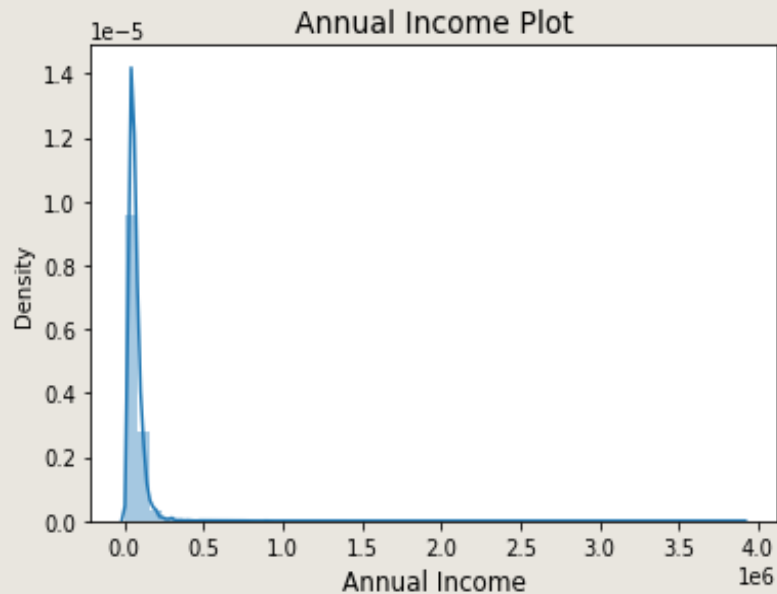
# UNIVARIATE ANALYSIS

Laon Amount compare using Bar chart and Box plot



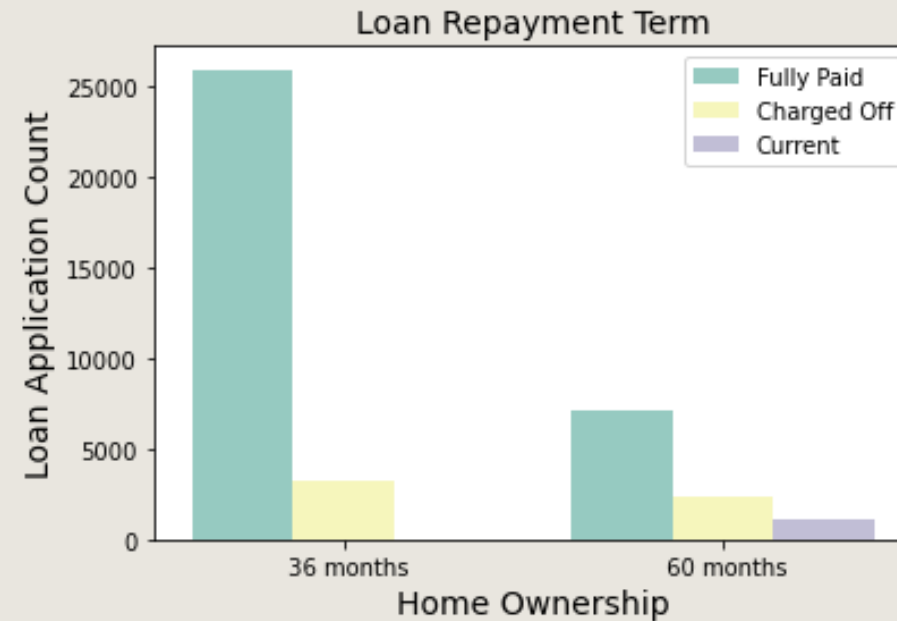
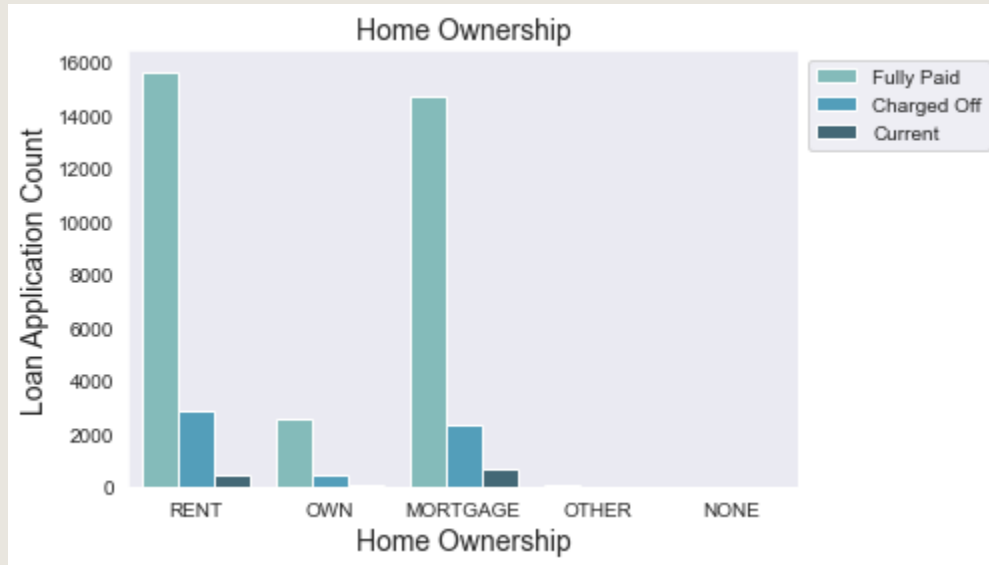
From above trend it shows that most of the loan amount is in the range of 5000 to 15000

# UNIVARIATE ANALYSIS



- Annual income of most of the customer is around 40000 to 90000
- Interest Rate is in between 10% to 15%
- Most of the loans are fully paid, 5000 are charged off and some are the current loan.

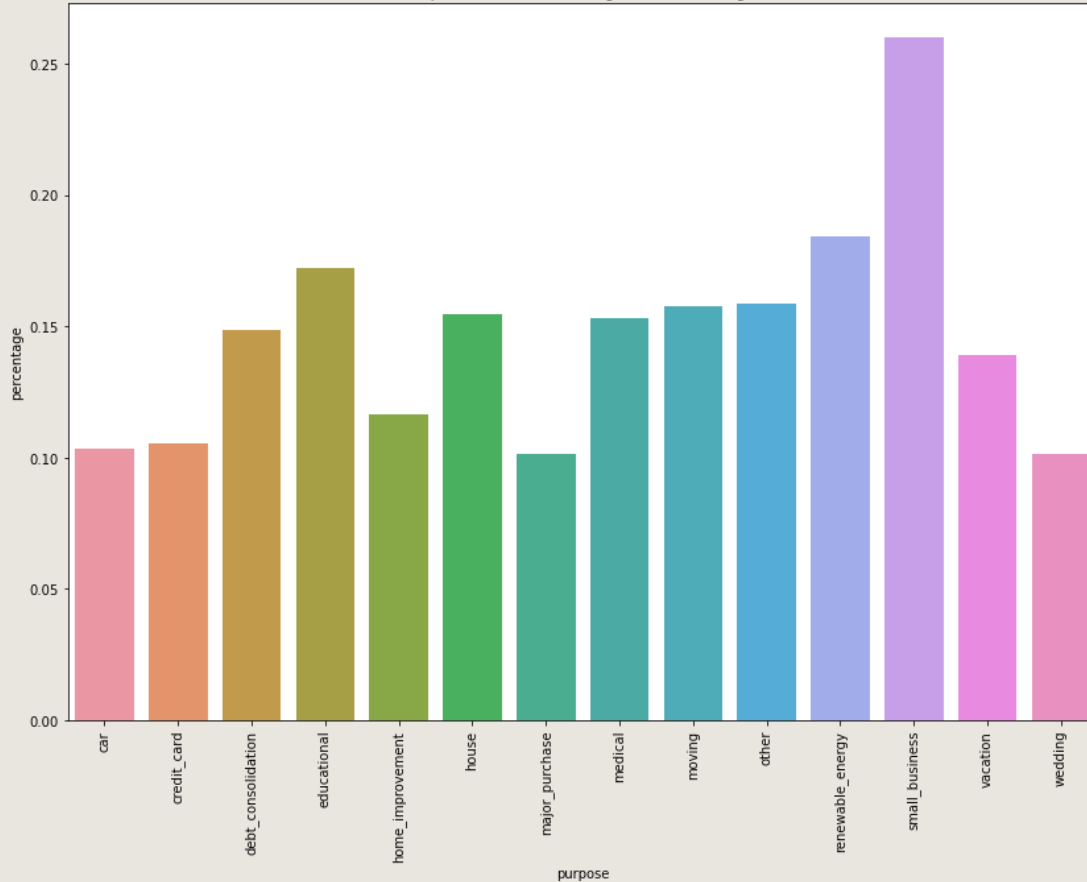
# UNIVARIATE ANALYSIS



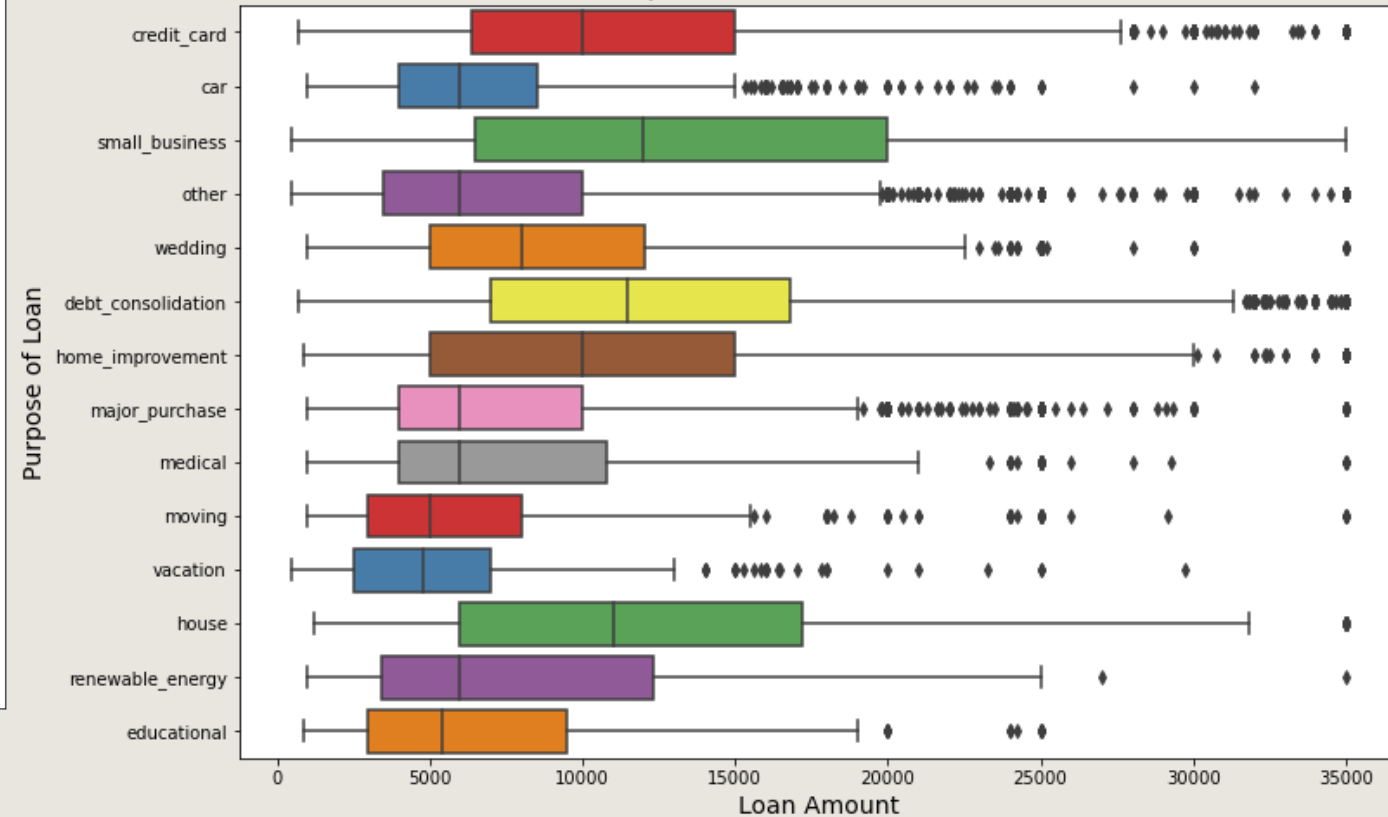
- Loan Application from Rent and Mortgage is higher then any else and charge off is also higher.
- Loan Application is higher for 36month then 60month and charge off is also higher.

# BIVARIATE ANALYSIS

Purpose of Loans vs Charged-off Percentage



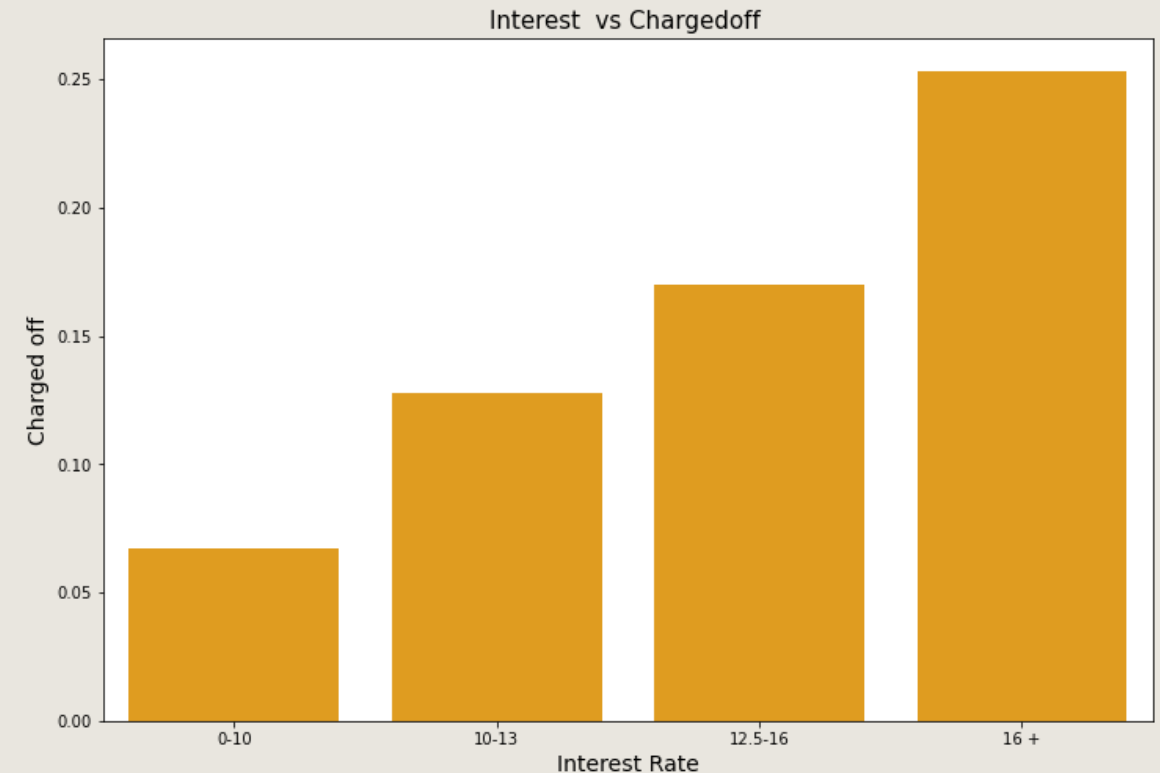
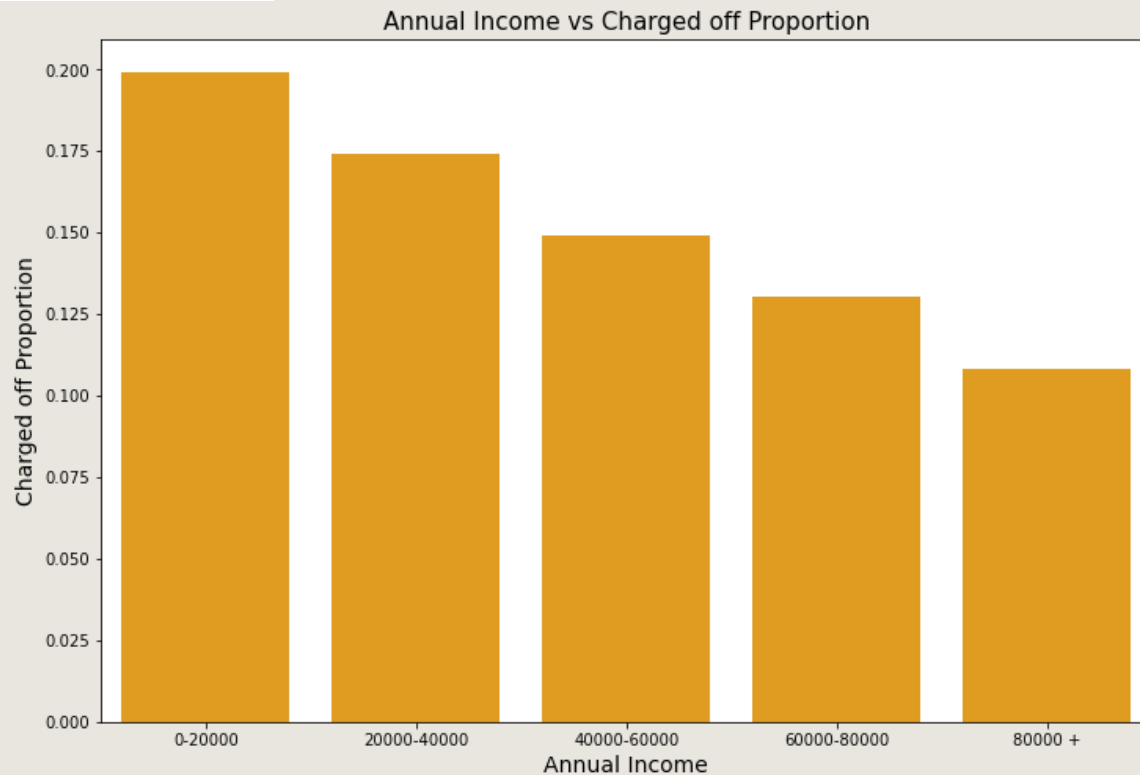
Purpose of Loan vs Loan Amount



- Purpose of Loan “Small Business” is higher percentage of Charged off.
- Purpose of Loan “Small Business” takes higher loan amount.

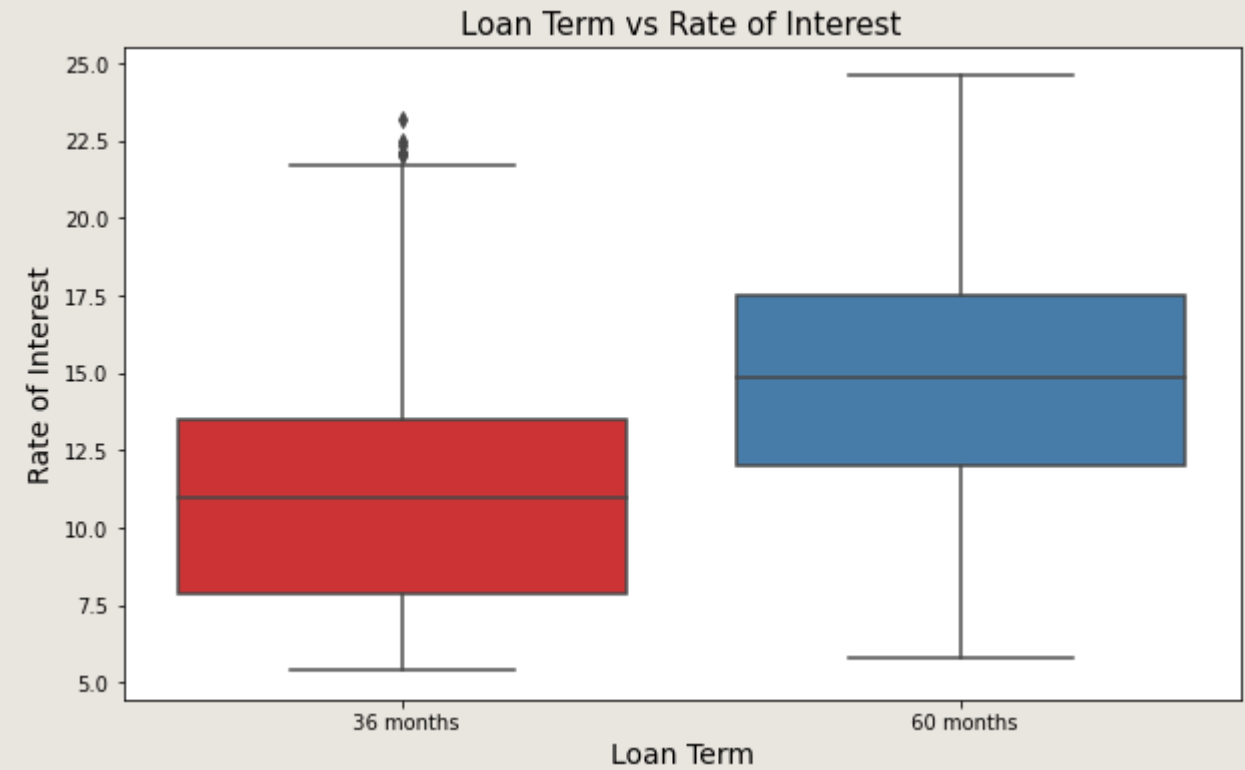
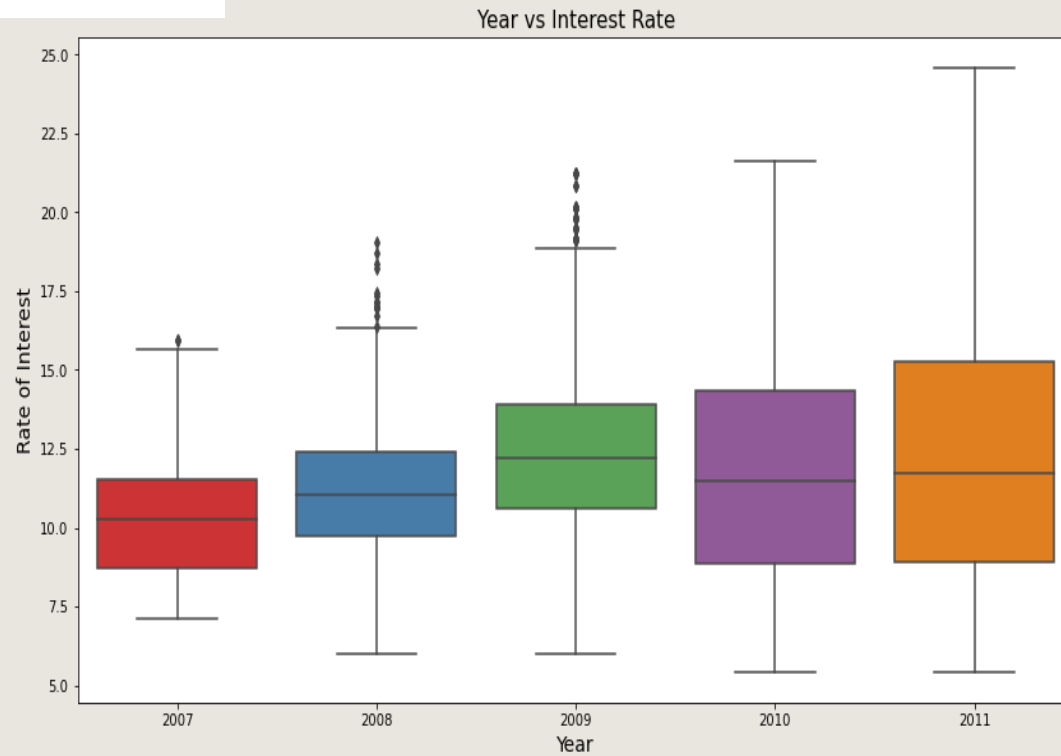


# UNIVARIATE ANALYSIS



- Annual Income greater than 80000+ charged off is less, and 0 to 20000 charged off is more.
- If interest rate is higher then charged off is higher.

# UNIVARIATE ANALYSIS



- Every year interest rate increases.
- For 60-month interest rate is higher.

# CONCLUSION

- Maximum loan range is 5000 to 15000
- Annual income of most of the customer is around 40000 to 90000
- Interest Rate is in between 10% to 15%
- Most of the loans are fully paid, 5000 are charged off and some are the current loan.
- Loan Application from Rent and Mortgage is higher then any else and charge off is also higher.
- Loan Application is higher for 36month then 60month and charge off is also higher.
- Purpose of Laon “Small Business” is higher percentage of Charged off.
- Purpose of Loan “Small Business” takes higher loan amount.
- Annual Income greater then 80000+ charged off is less, and 0 to 20000 charged off is more.
- If interest rate is higher then charged off is higher.
- Every year interest rate increases.
- For 60-month interest rate is higher.



# THANK YOU

***Abidi Syed F Parvaiz***