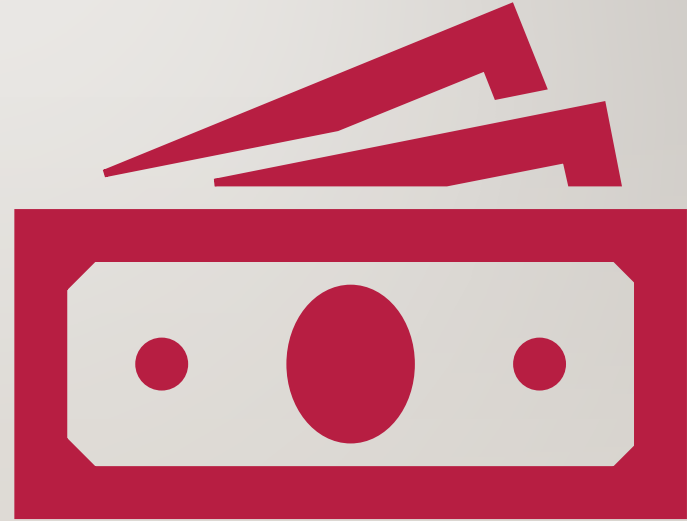


# LENDING CLUB CASE STUDY



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## STEPS PERFORMED:

1. Import All the libraries
2. Load the data
3. Clean the data
4. Analyze the data and perform univariant and bivariate analysis
5. Develop insights

## I. Import Libraries

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1. *Numpy*

2. *Pandas*

3. *Matplotlib*

4. *Seaborn*

## 2. Load the data

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*1. Loan Data*

*2. Column Definitions*

### 3. Clean the data

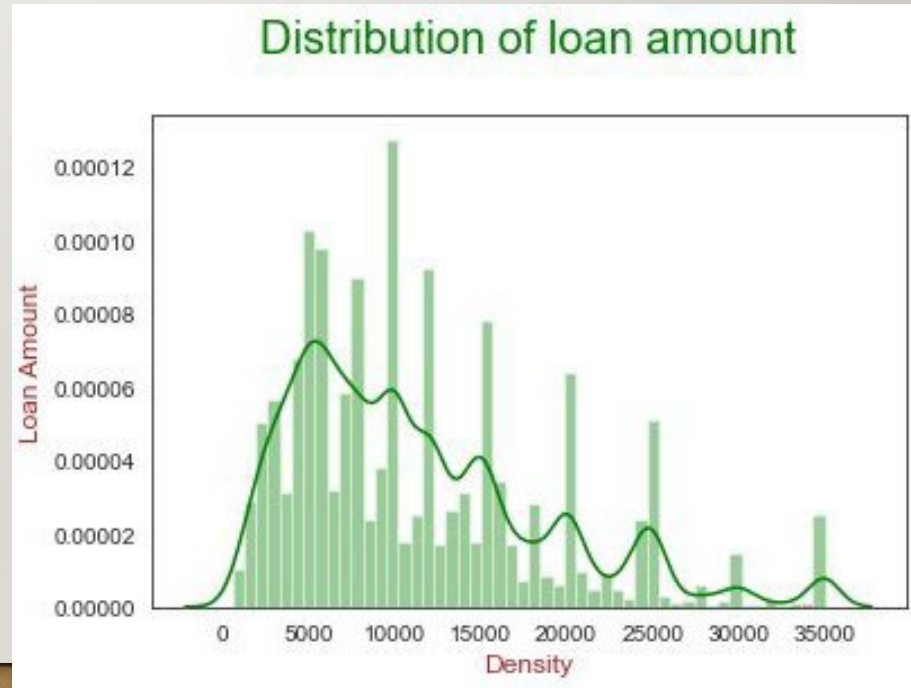
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- Remove all columns with Null values and that are not defined in column definition dataset
- Remove all the rows with max Null values

# UNIVARIANT ANALYSIS

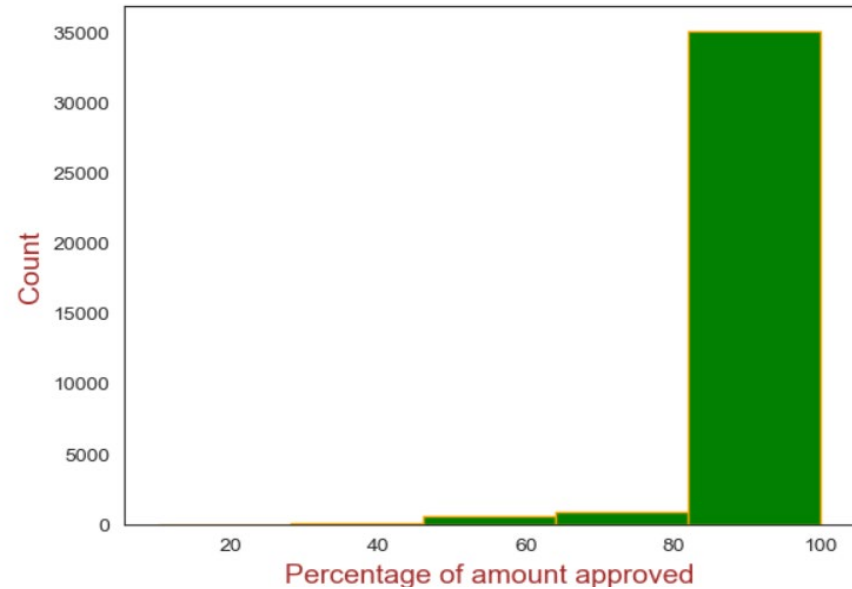
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- + Loan applied lies between 5000 and 35000
- + Most of the loan borrowers need money under 15000



+ Majority of the people were funded

Ratio of loan approved amount

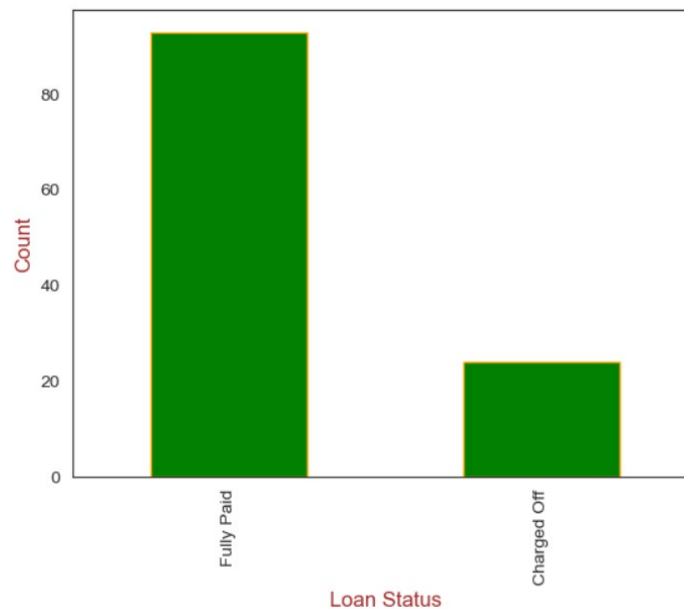


# LOAN STATUS

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+ Funded amount lies between 0 to 35000  
but there are 129 records with 0 funded  
amount. which means investors didn't invest  
for these 129

People who were not accepted to fund by investor

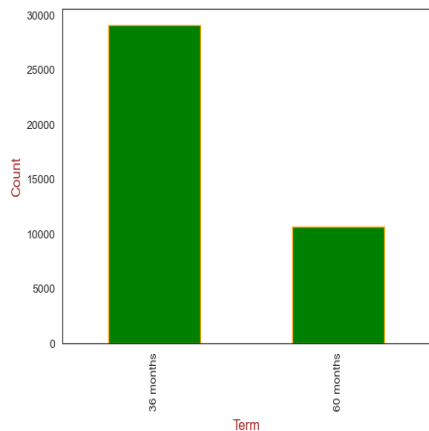




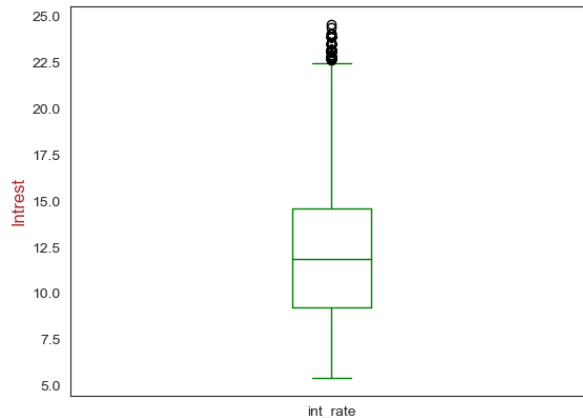
# ANALYSIS

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People Count Vs Loan Term



Distribution of Interest Rates

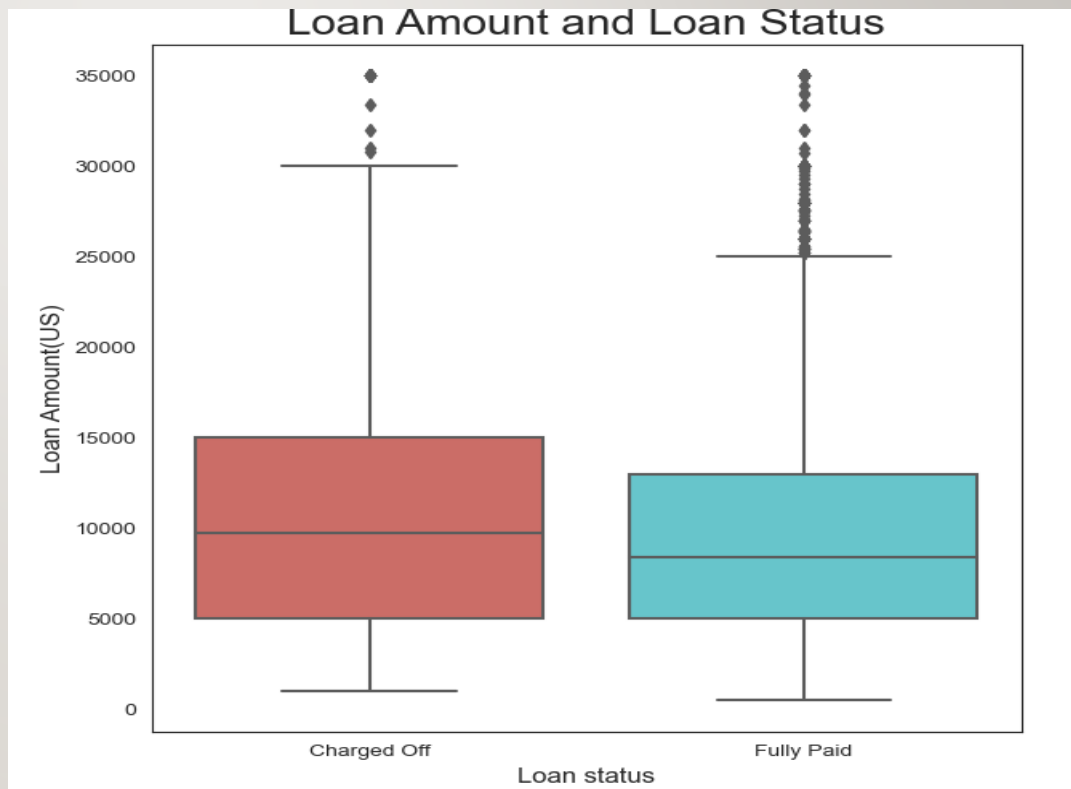


- Interest rate lies between 5% and 24%
- High interest implies high risk and vice versa
- Majority of the people are in between 10 and 15 percent interest rate

## Bivariant analysis

### Loan Amount Vs Loan Status

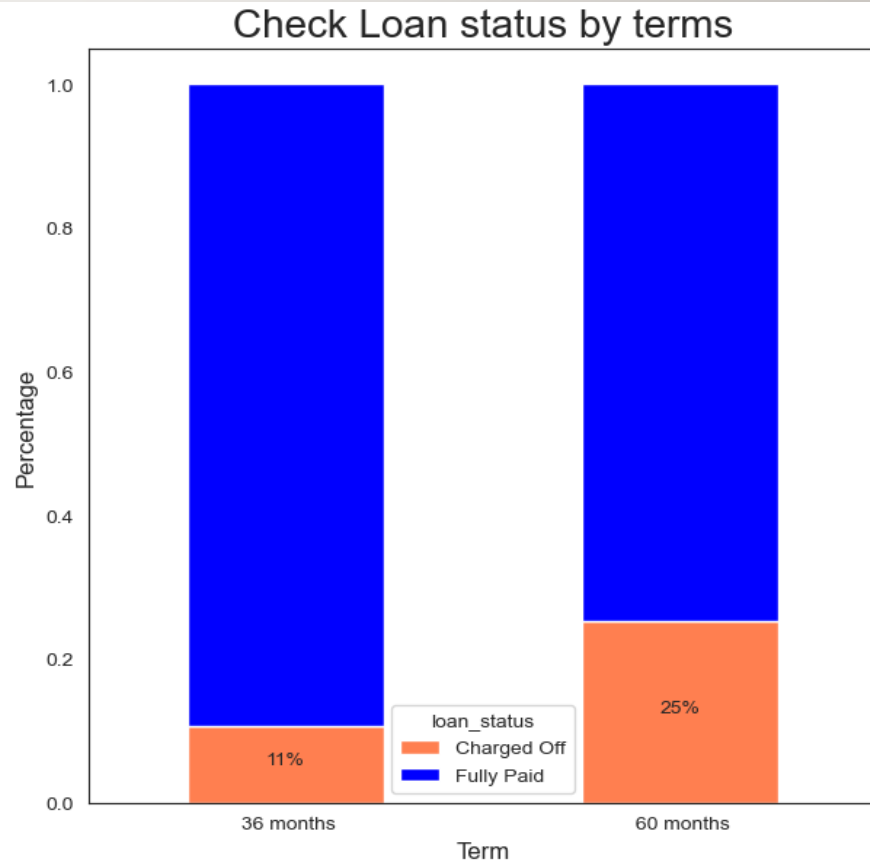
- By observing the median and 3rd quartile people who took higher loan amount are likely to charge off



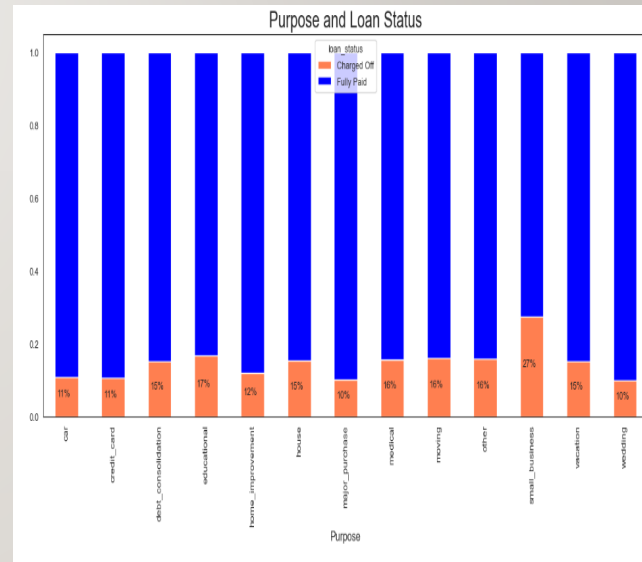
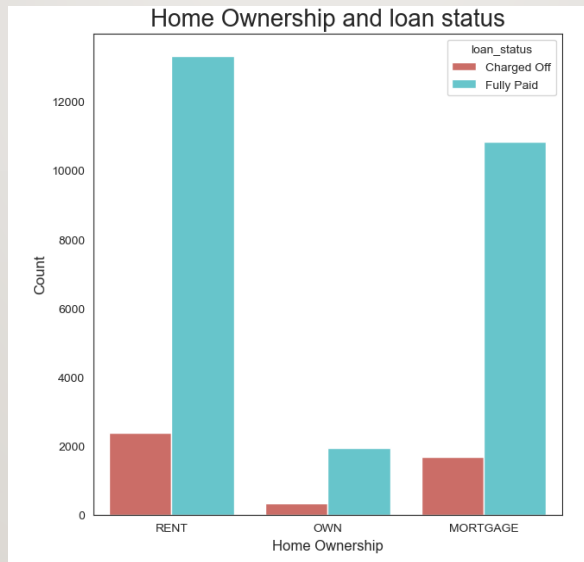
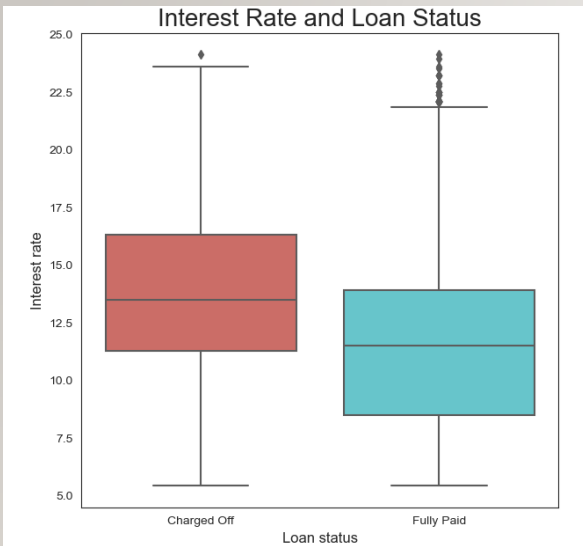
## Bivariant analysis

### Loan Status by terms

- The percentage of defaulters are higher in 60 months term with about 25% charge-off whereas it is just 11% for 36-month term
- So, there is a possibility that longer term loans are riskier and more prone to higher default



# Bivariant analysis



## Other Analysis

- Small business are more likely to charge off compared to other purpose as they are the 28% of people who charged off

*Thankyou*