

# LENDING CLUB CASE STUDY

**Group Assignment**

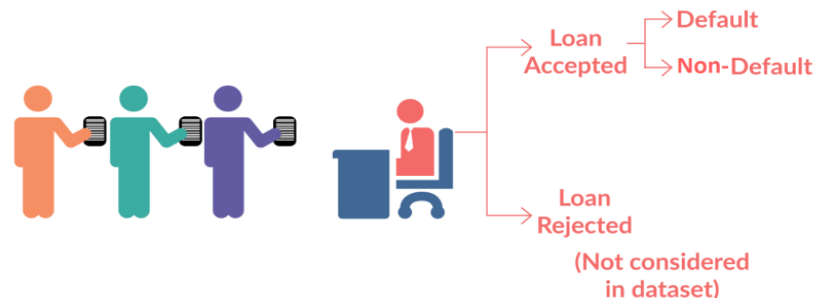
**Submitted by : Akshatha K**

**Sanghavi Gopinath**

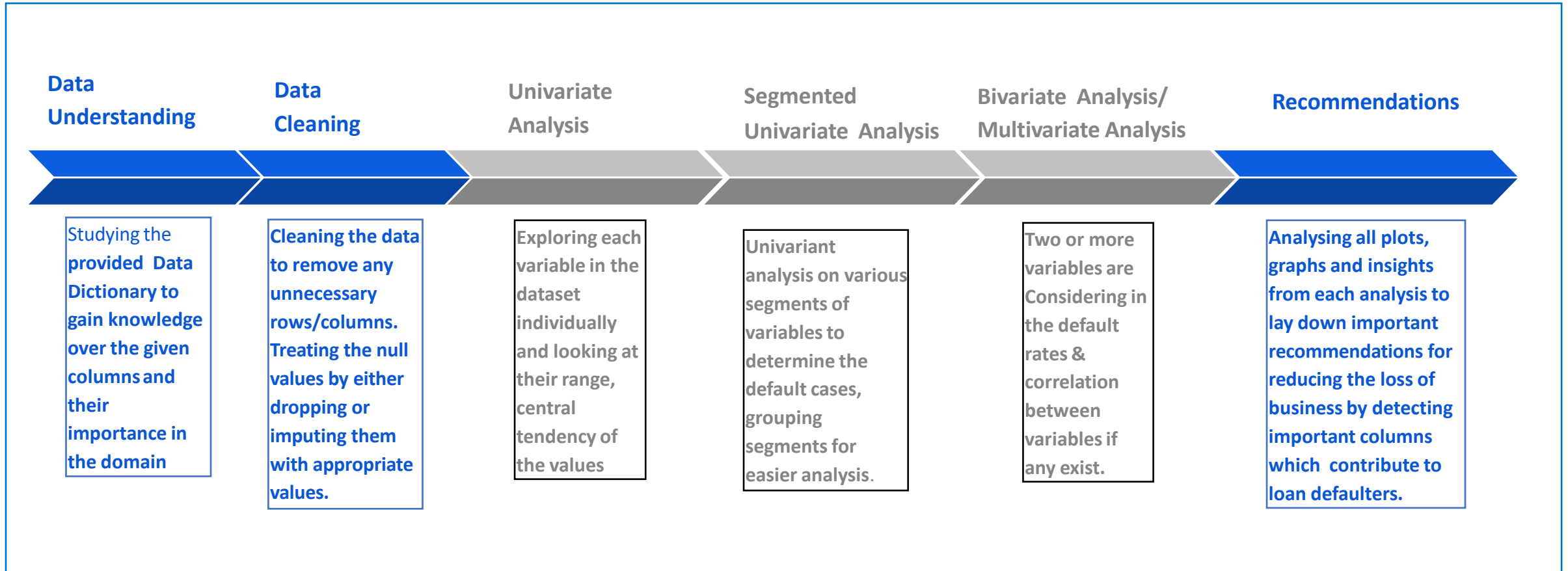
A consumer finance company which specialises in lending various types of loans to urban customers. When the company receives a loan application, the company has to make a decision for loan approval based on the applicant's profile. Two types of risks are associated with the bank's decision:

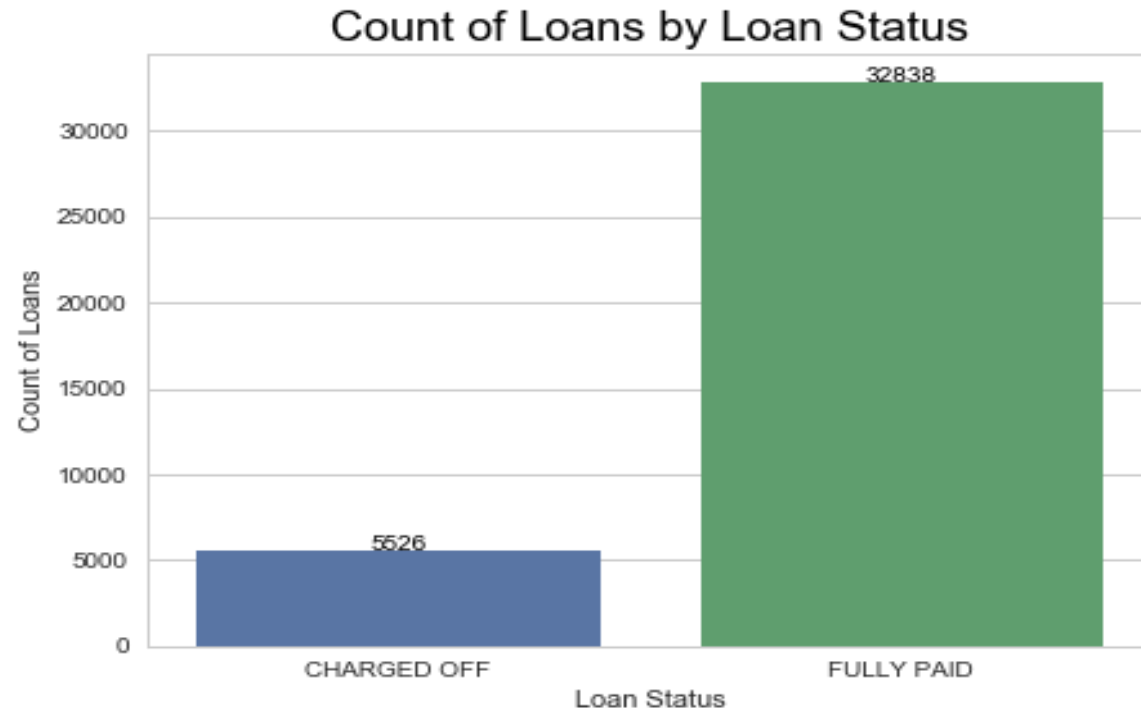
- ❑ If the applicant is likely to repay the loan, then not approving the loan results in a loss of business to the company
- ❑ If the applicant is not likely to repay the loan, i.e. he/she is likely to default, then approving the loan may lead to a financial loss for the company.

## LOAN DATASET



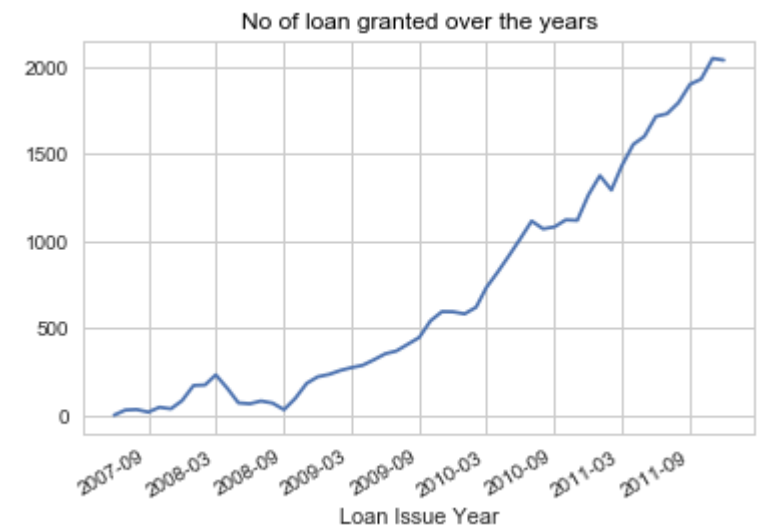
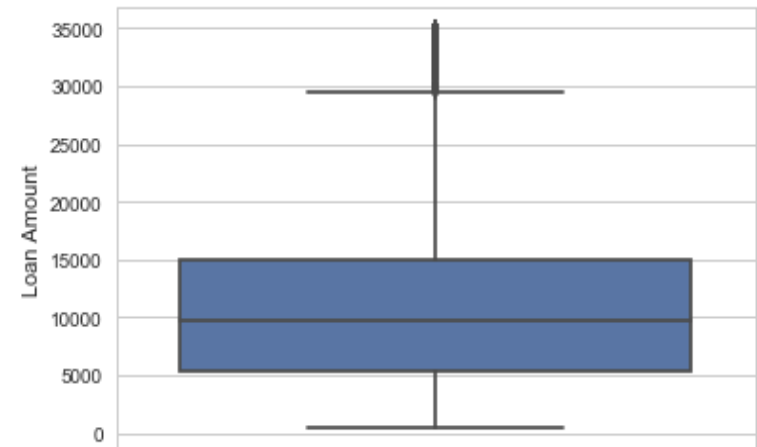
# PROCESS FLOW OF THE ANALYSIS

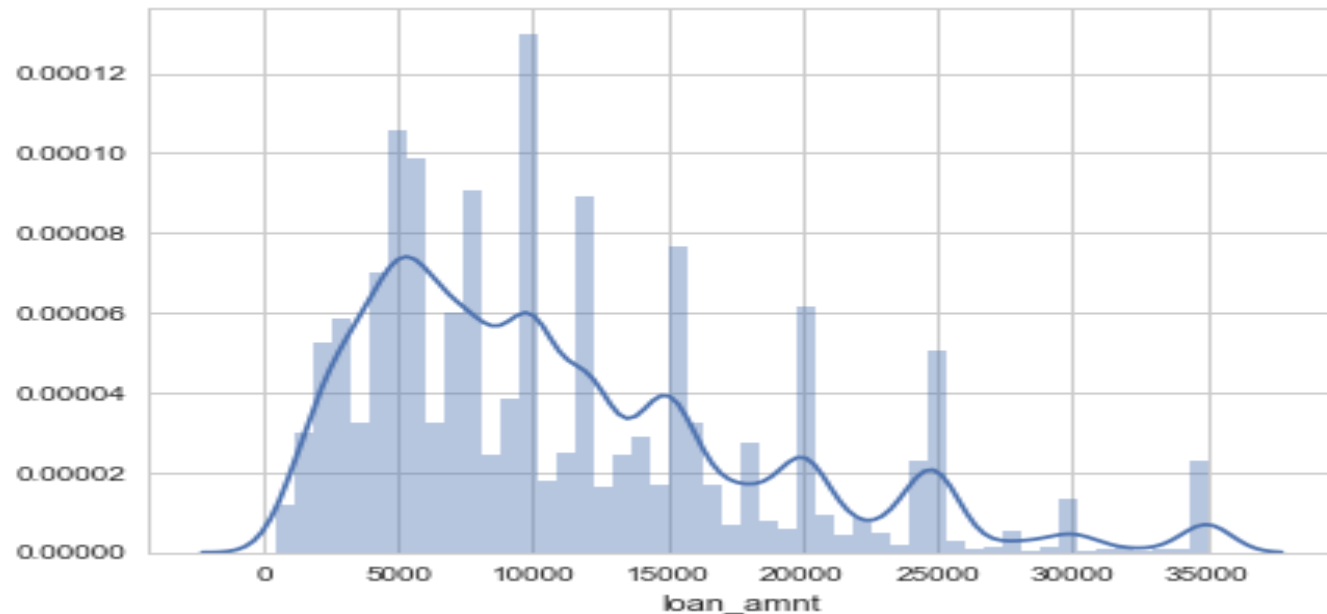




Observation :

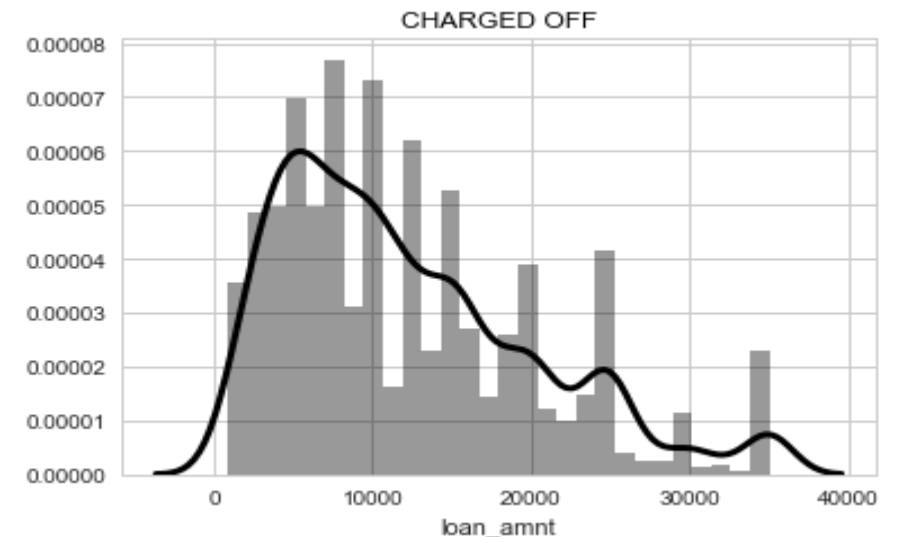
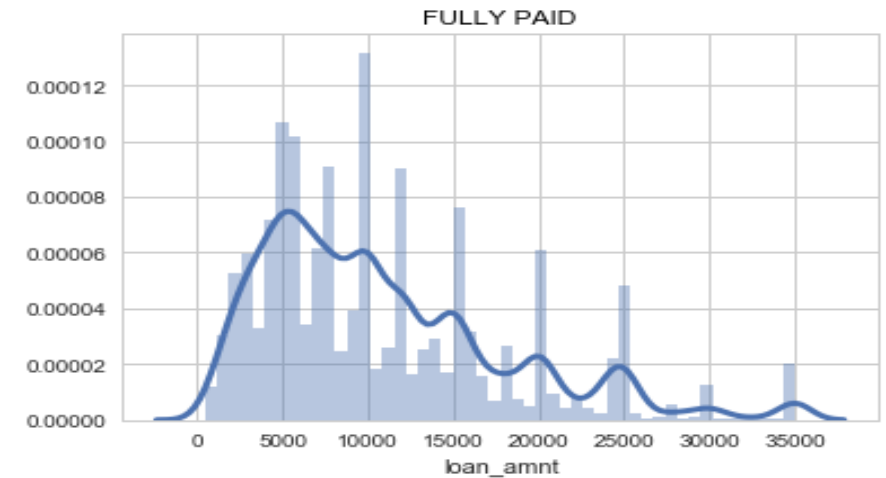
- Most of the loans are fully paid
- 5626 loans comes under defaulter
- Most of the loan amount is between 5000 to 15000
- Loan Applicants have been increasing exponentially from year 2007 to 2011



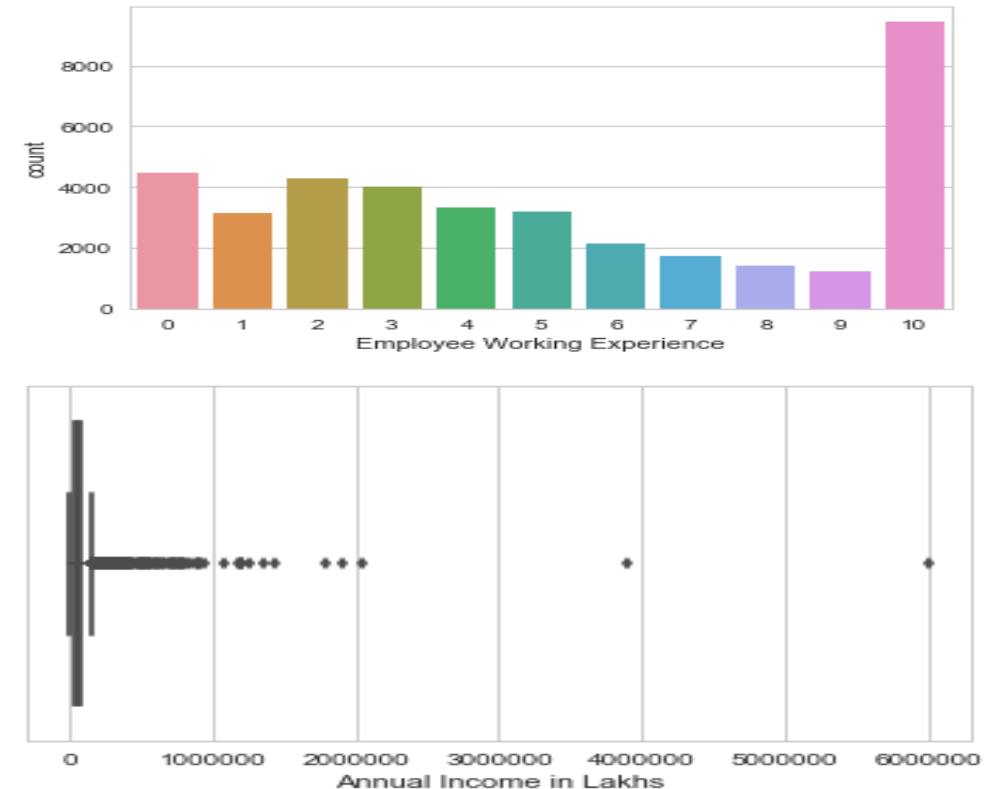
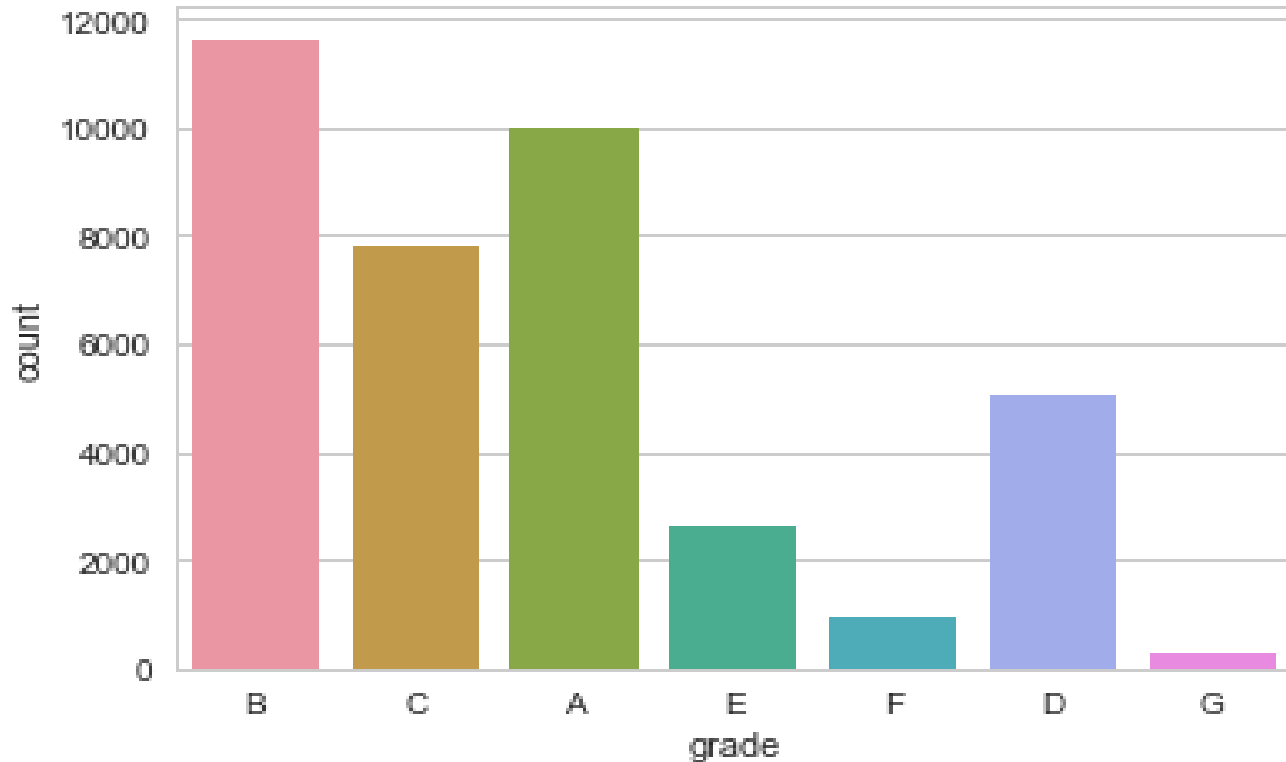


Observation :

- Most of the loan amount lies within 10000 so we can see data skewed.
- We can see Data default also more with the loan amount  $< 10000$

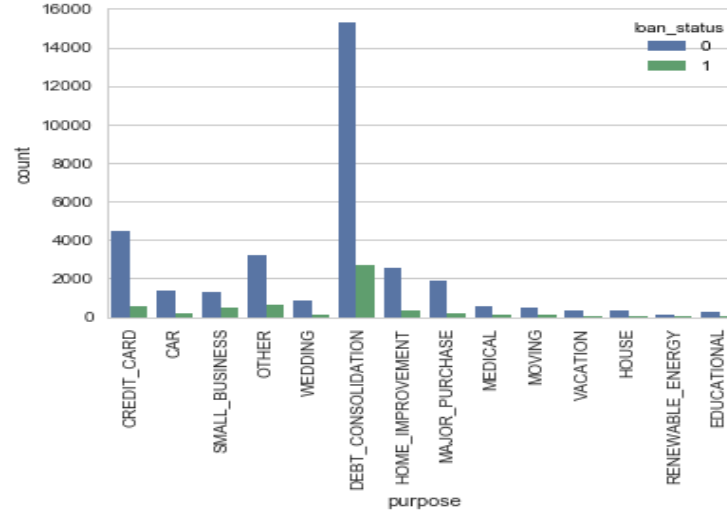
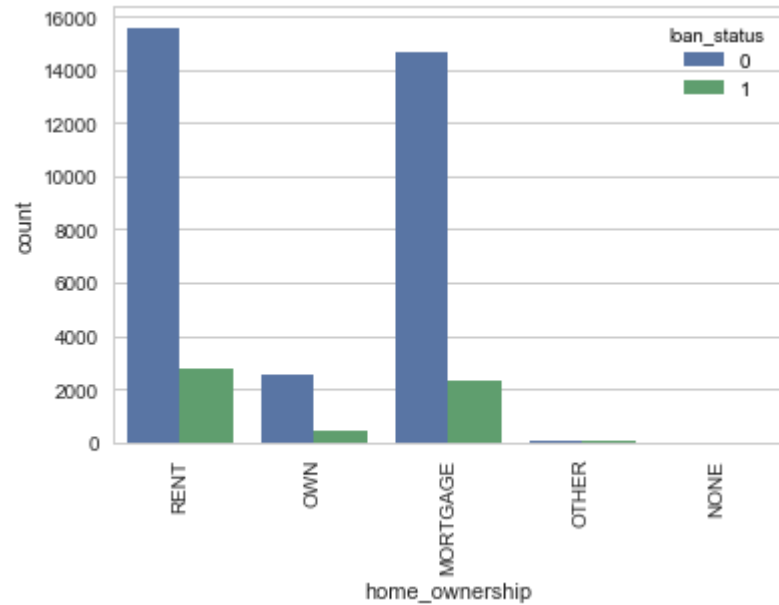


# LOAN GRADE AND EMPLOYMENT EXPERIENCE ANALYSIS



Observation :

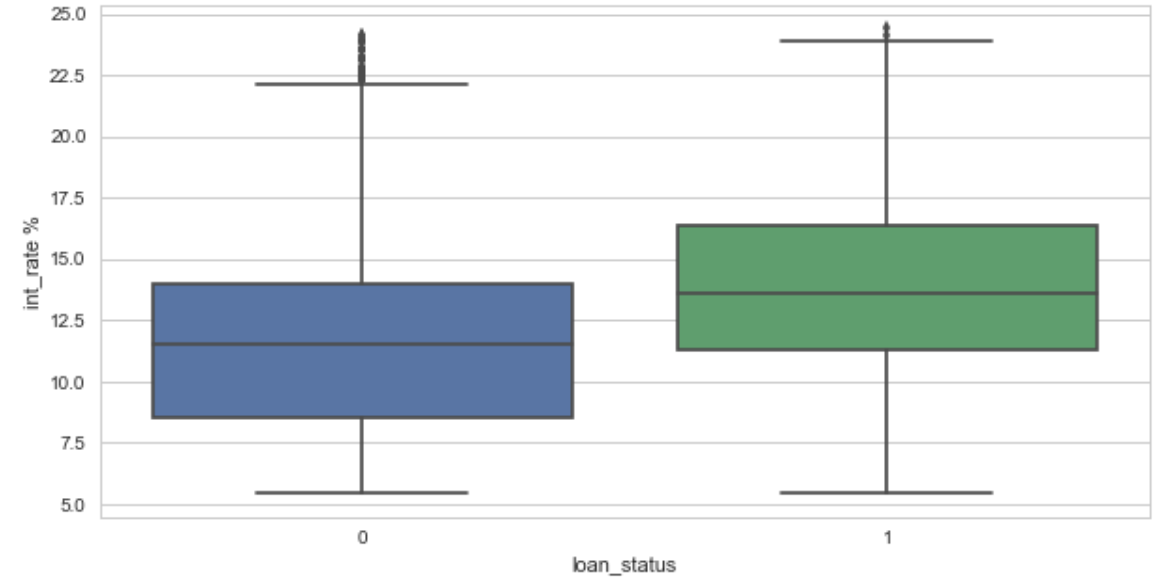
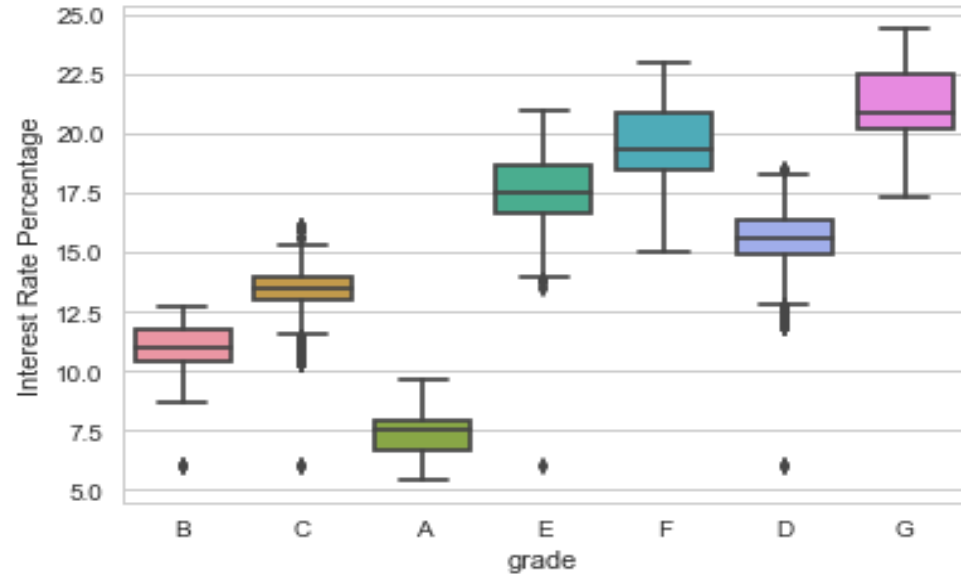
- Most of the loans have grade of A and B. Therefore stating most of the loans are high graded loans
- Majority of employees applying for the loan have more than 10 years of experience.
- Most of the customer salary is within 100000.
- There are only two customer with high income.



Observation :

- Most of the Customer have rented or mortgage homeownership. Defaulters are less with the customer have own house.
- Majority of loan has been given for the debt consolidation purpose.
- Most of the loans were giving with term 36.
- Customer having term 36 has high chance of defaulting

# ANALYSIS OF INTEREST RATE IMPACT ON LOAN STATUS

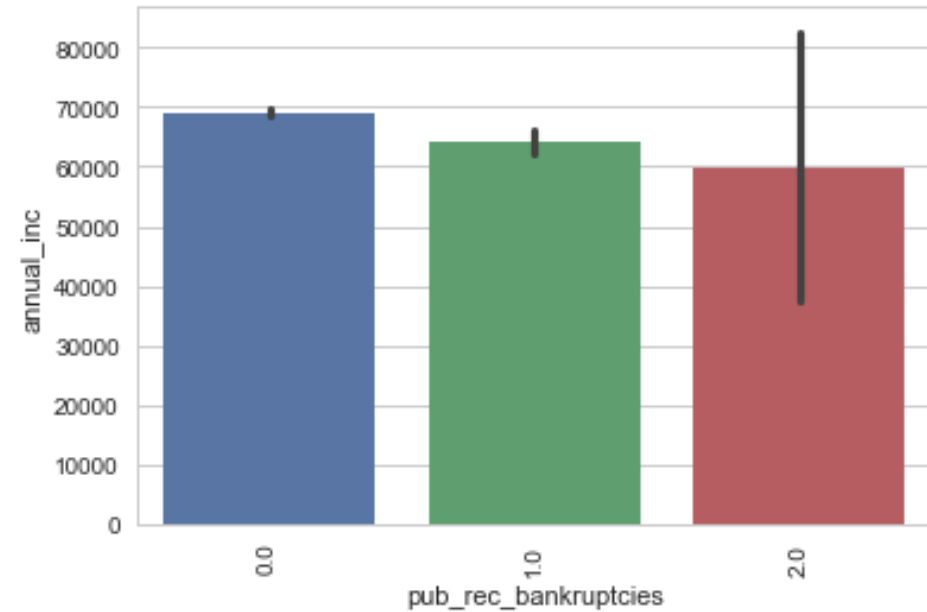
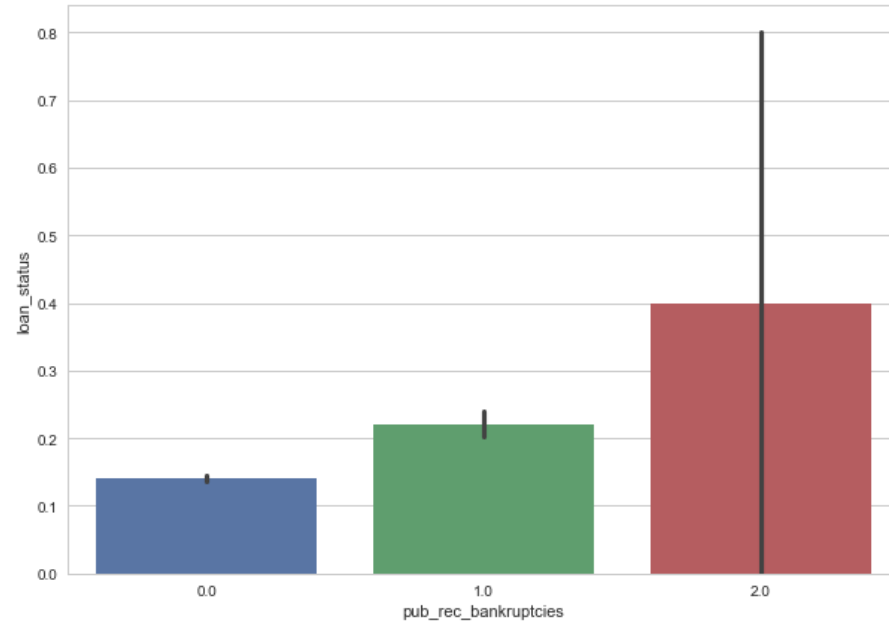


Observation :

- Customers assigned to Grades G & F has highest Interest rates.
- High rate of interest has more Charged Off loans.



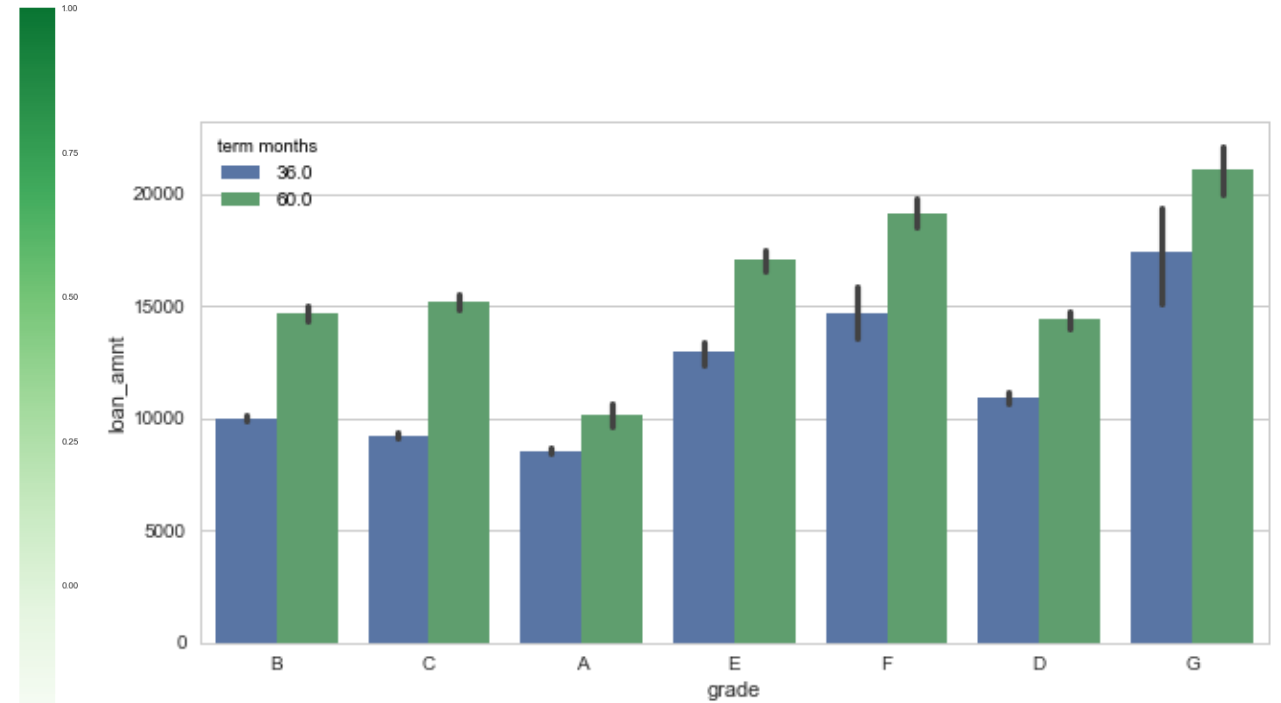
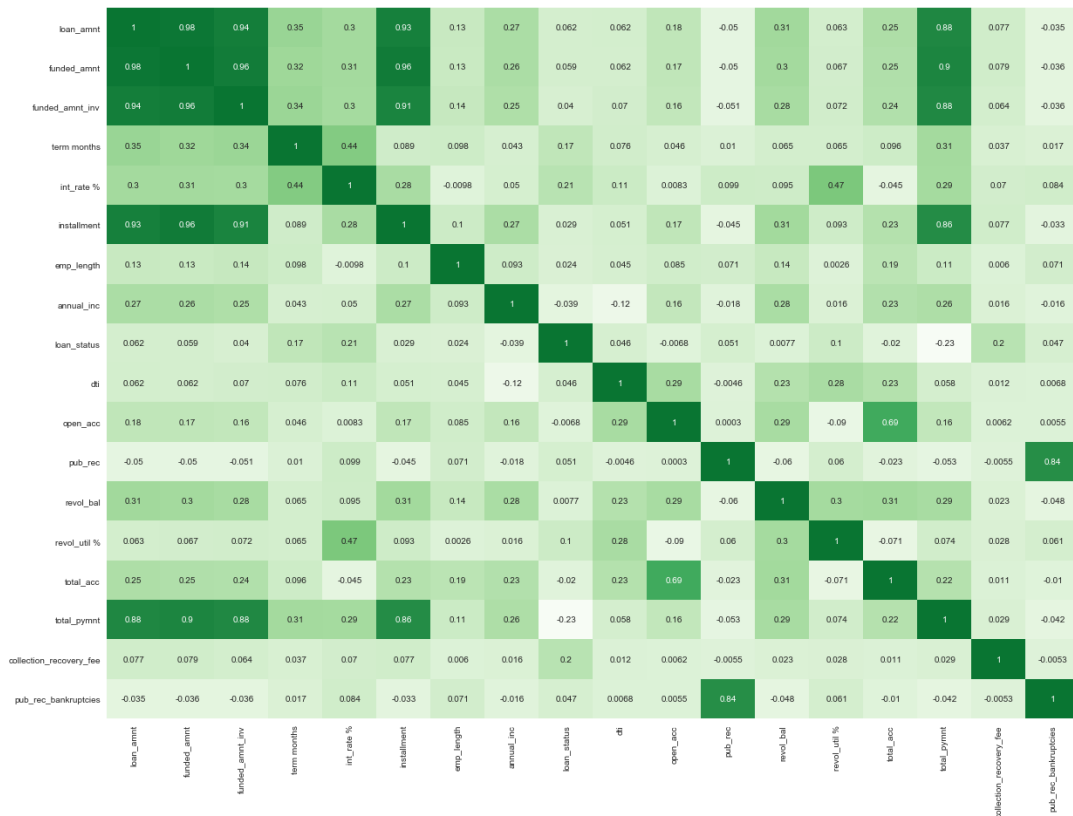
# Analysis of Bankrupt customer and its Charged off behavior.



Observation :

- Customers with bankruptcies equal 1 or greater than 1 have high chances of default rates

# ANALYSIS OF BANKRUPT CUSTOMER AND ITS CHARGED OFF BEHAVIOR.



Observation :

- Higher the loan amount, longer the loan term and lower the grade.

## CONCLUSION

- Higher the rate of interest more the chance of defaulting.
- Customer staying in rented or mortgage house have high tendency to default.
- Customer with more bankrupt history have high tendency to default.
- When the purpose is debt consolidation check applicant thoroughly as it has high tendency to default.
- Higher interest rate loan has more defaulter. Always need to check the background of applicant thoroughly whenever interest rate is high.