LendingClub Case Study

GROUP MEMBERS:

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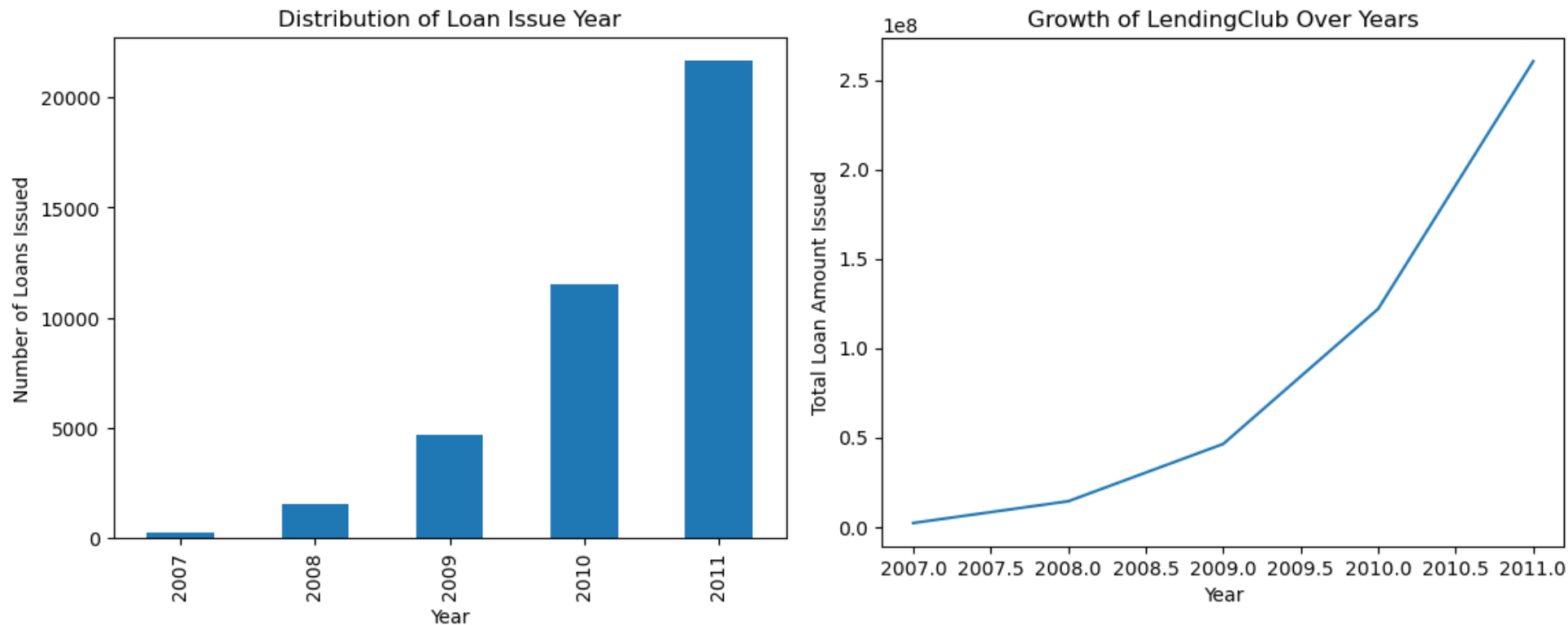HEMANTH

Objective

❖LendingClub is America's largest online credit marketplace, and the first marketplace bank connecting borrowers and investors.

❖When the company receives the loan application, it has to decide for loan approval on the basis of loan applicant's profile.

❖The objective is to use EDA to understand how consumer attributes and loan attributes influence the tendancy to default

Methodology

Data Cleaning → Univariate Analysis → Segmented Univariate Analysis → Bivariate Analysis → Recommendations
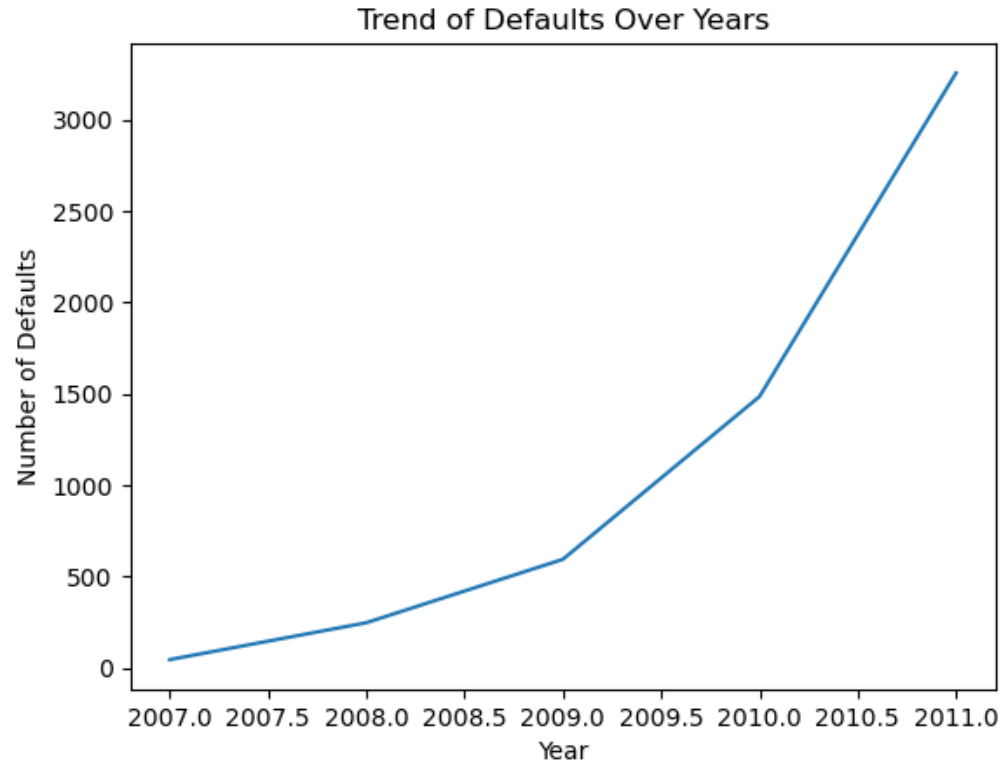
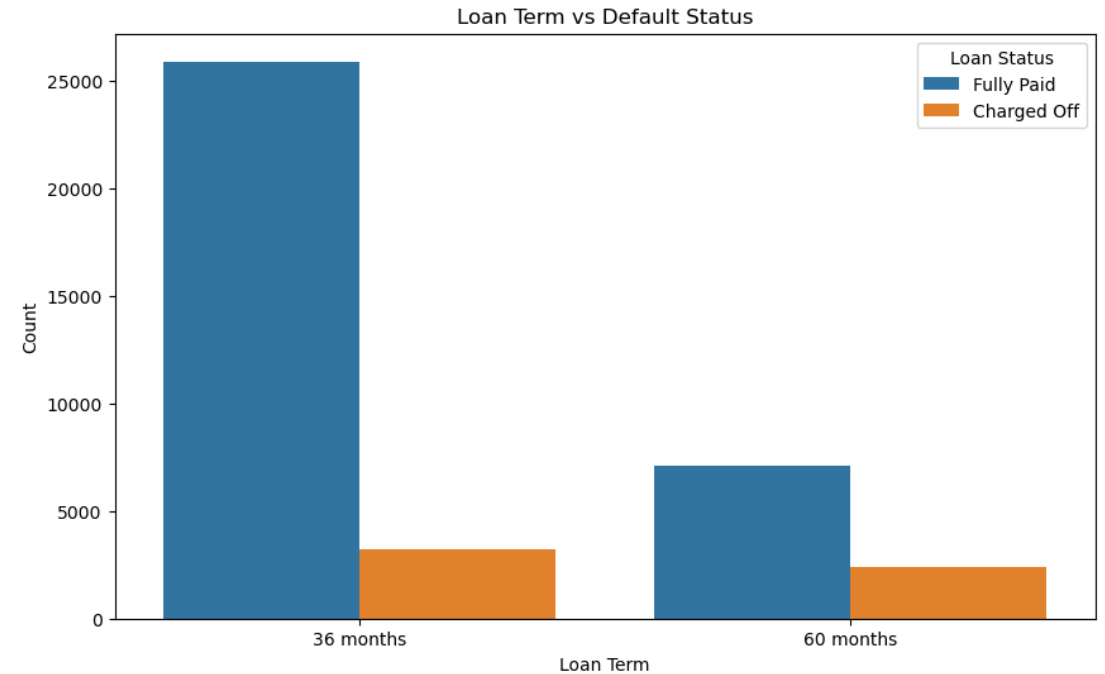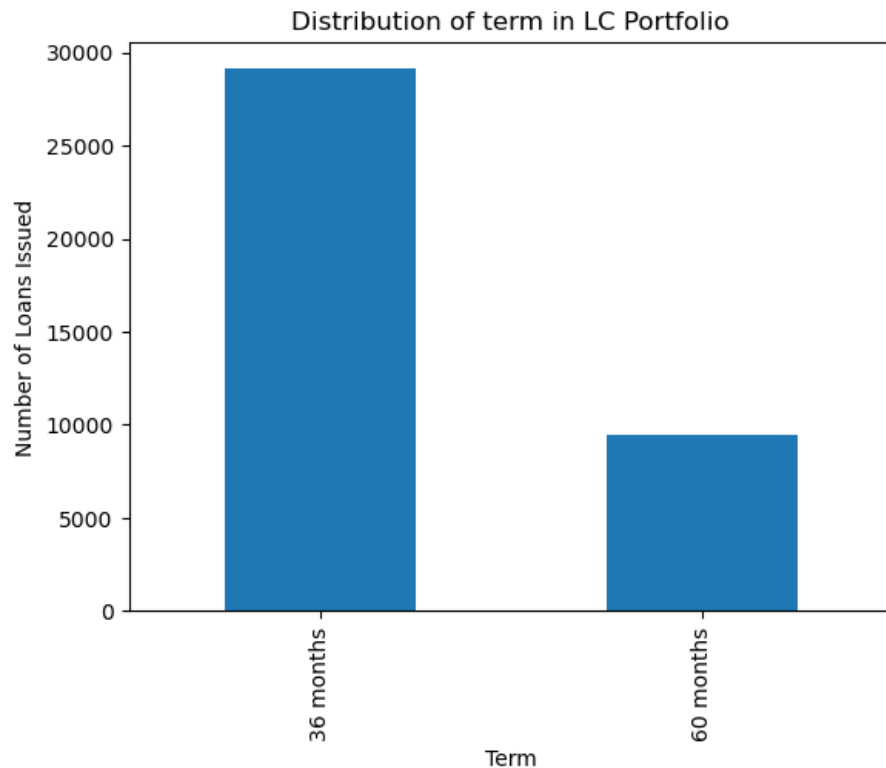# LendingClub Portfolio Analysis – Loans since launch

The LC Loan Portfolio is increasing at a rapid pace since it's launch

The no of people defaulting is growing at the same pace as business is growing
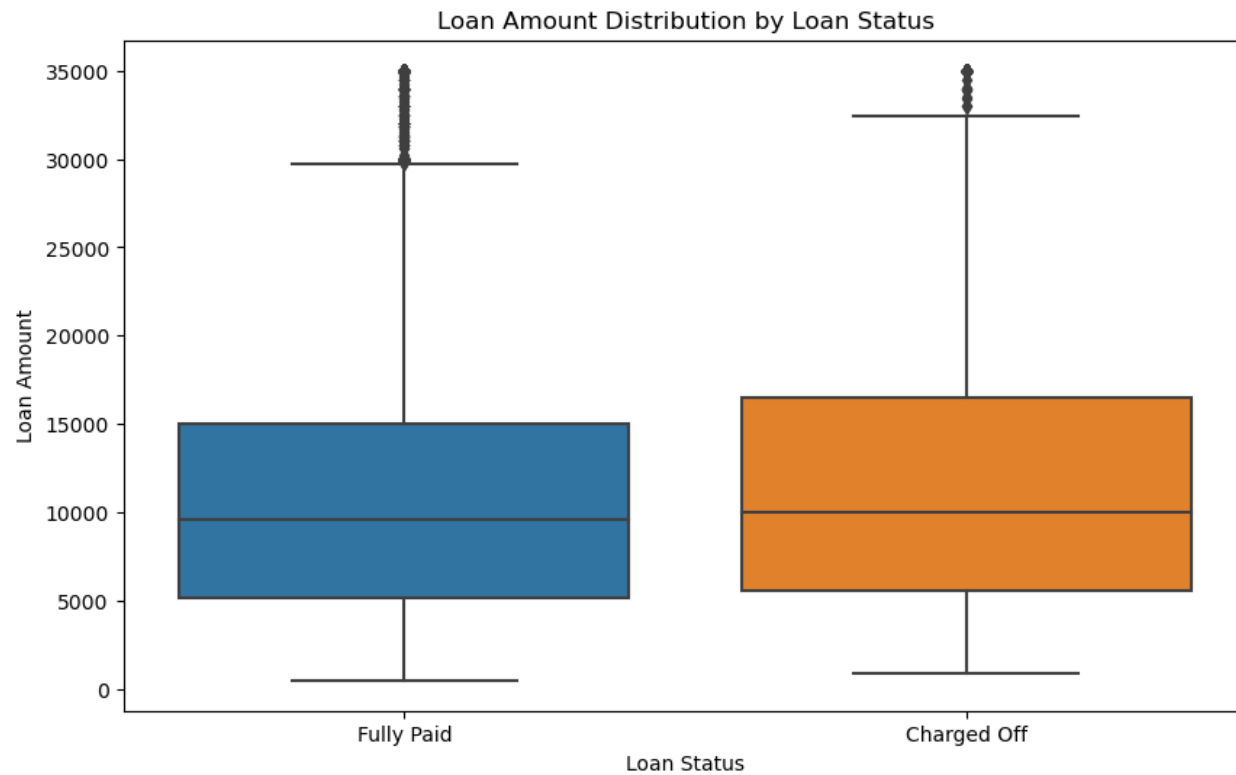
# LC has issued a large number of loans with lesser term. But the default rate is higher in loans with higher term

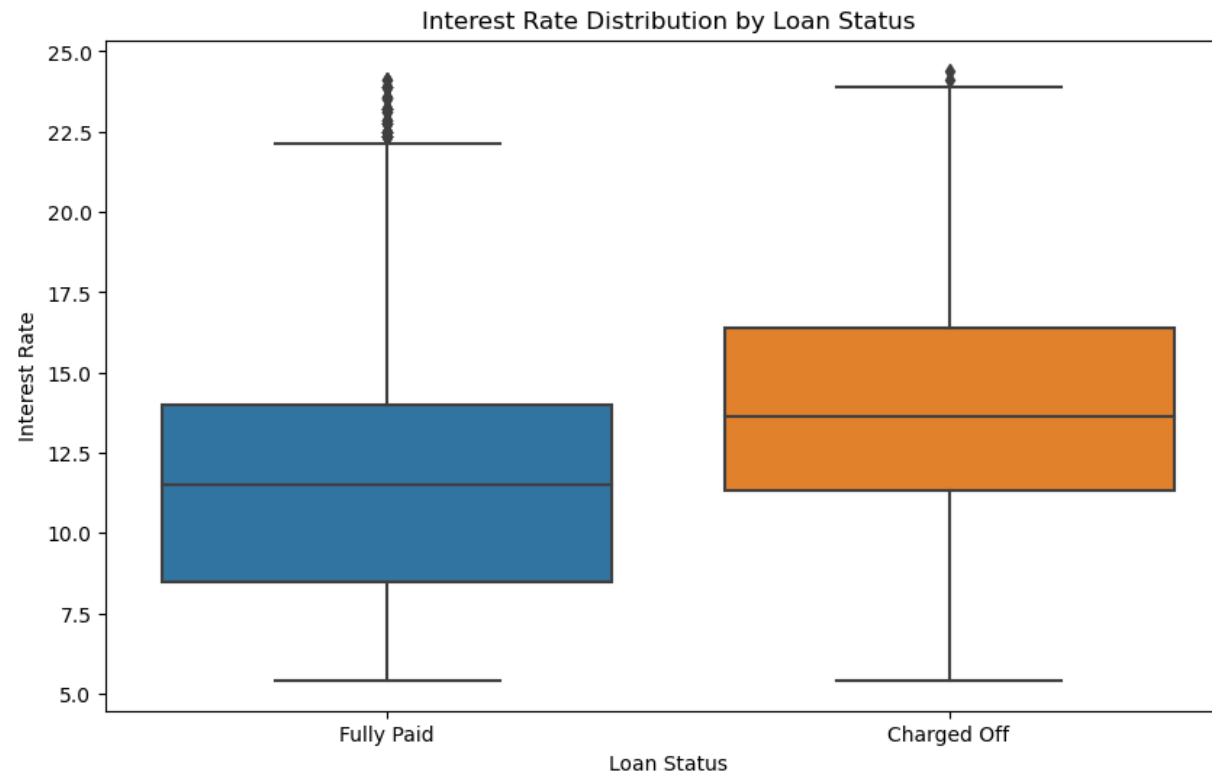# The grade A has least amount of defaults in 60 months loan term

Impact of Grades on Default Tendency for 60-Month Loans
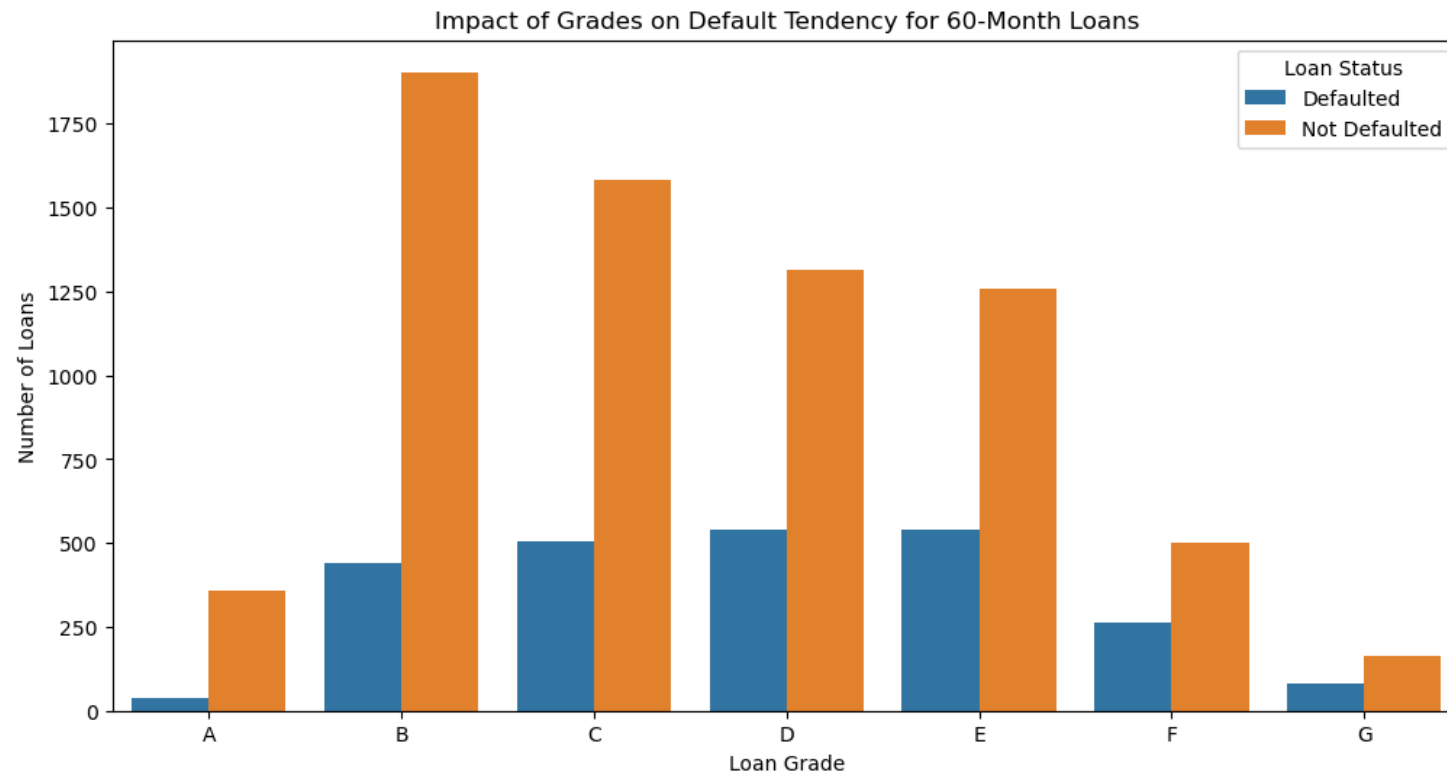
There is a tendancy to default when loan amount is higher as it is evident from the box plot
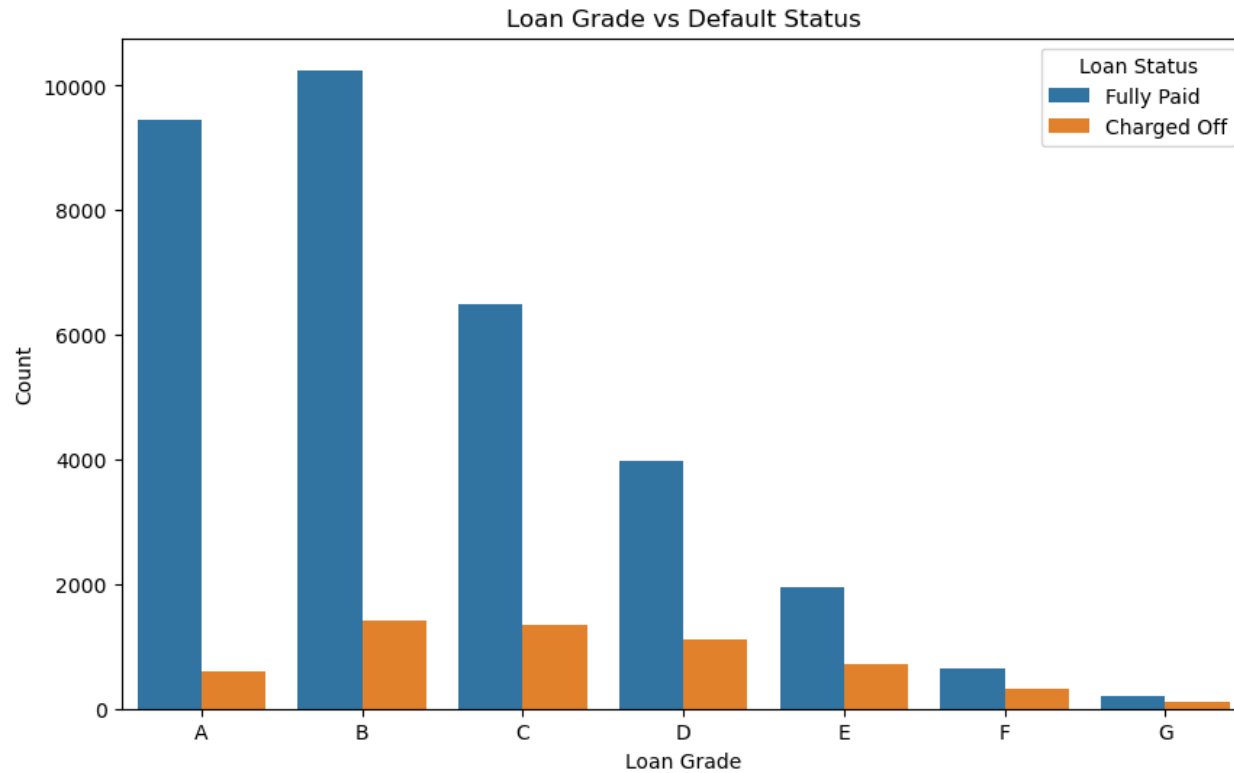
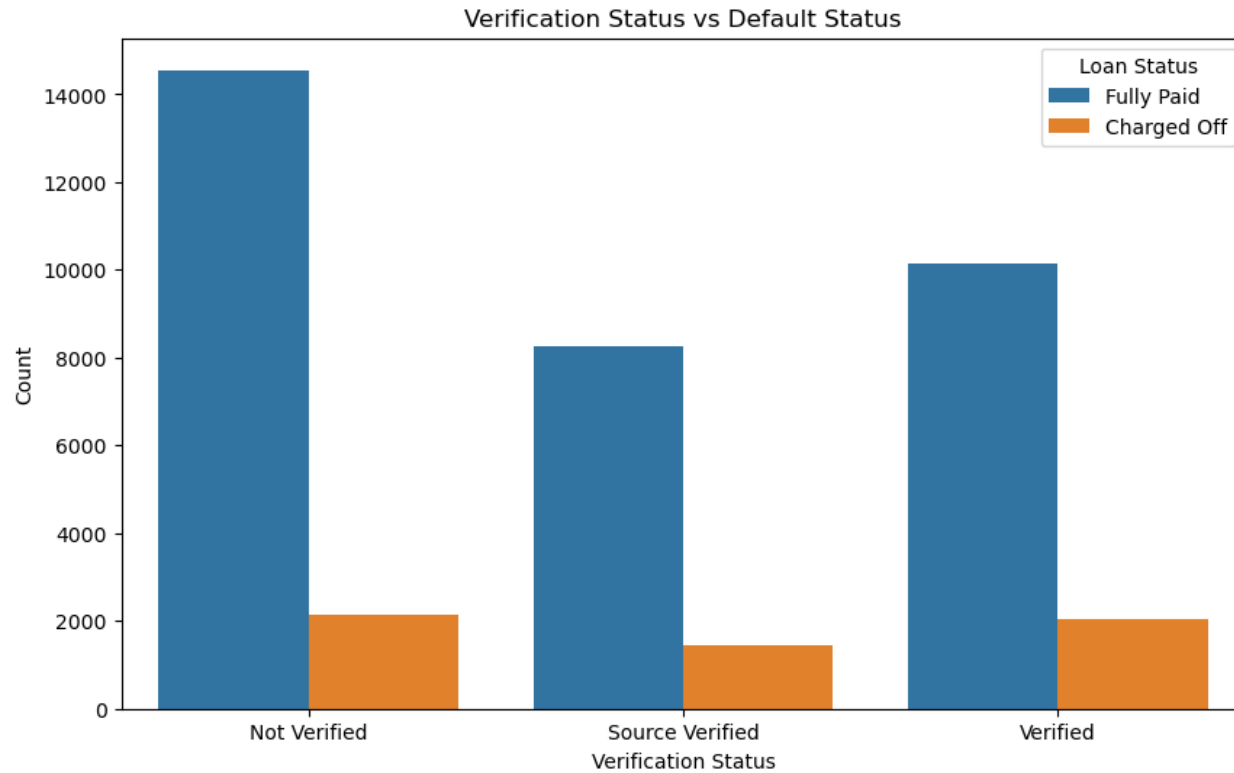# Lower income levels have higher tendency to default
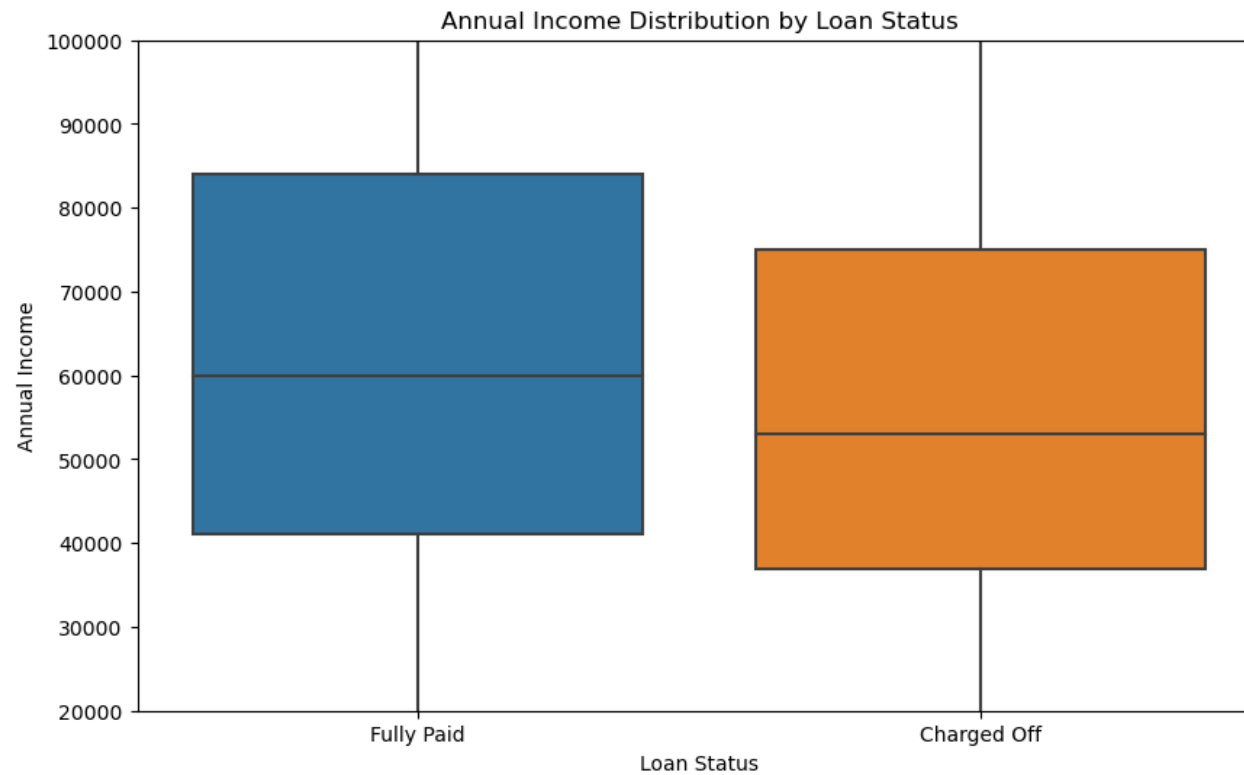
There is a higher tendency to default when Interest rates are higher as box plot suggest
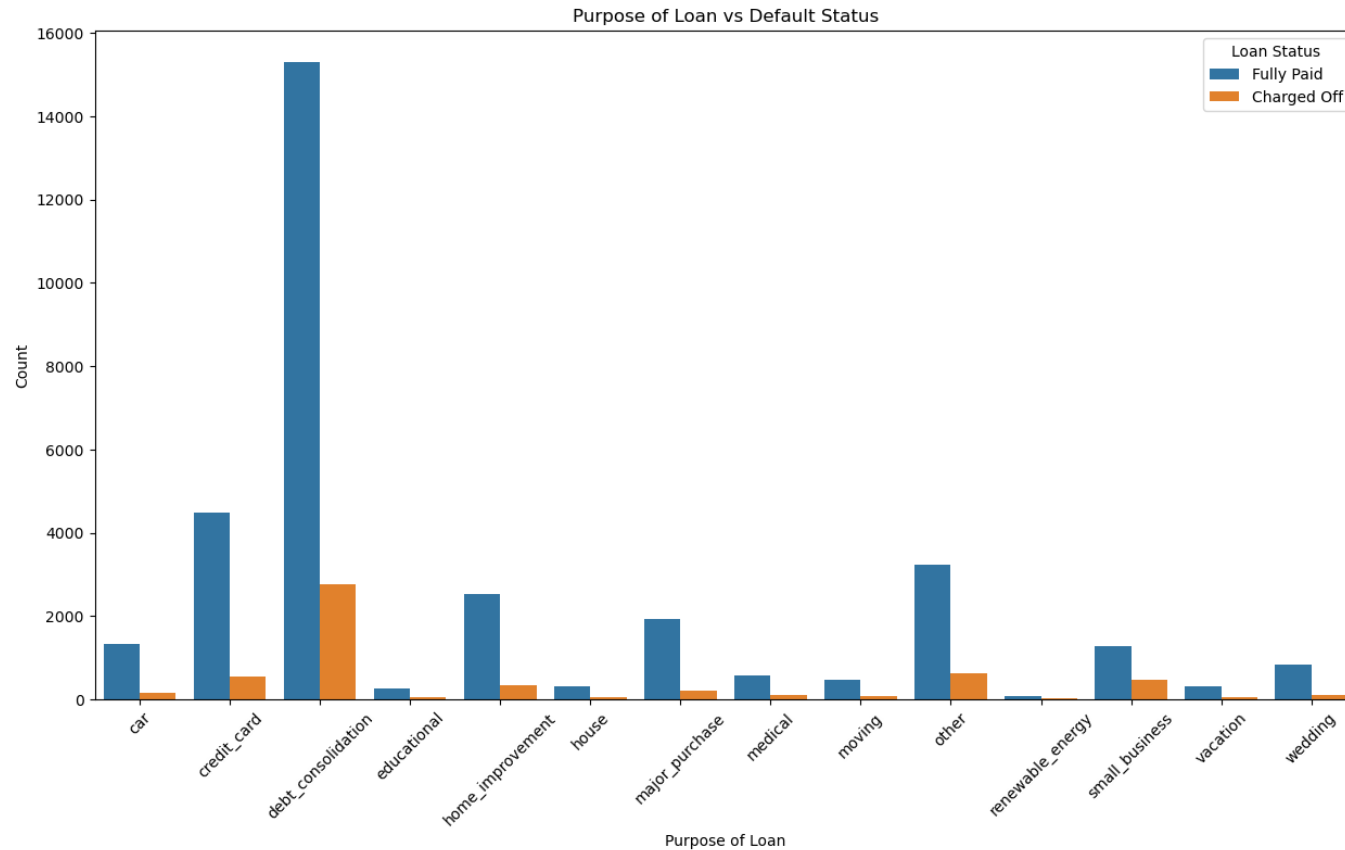
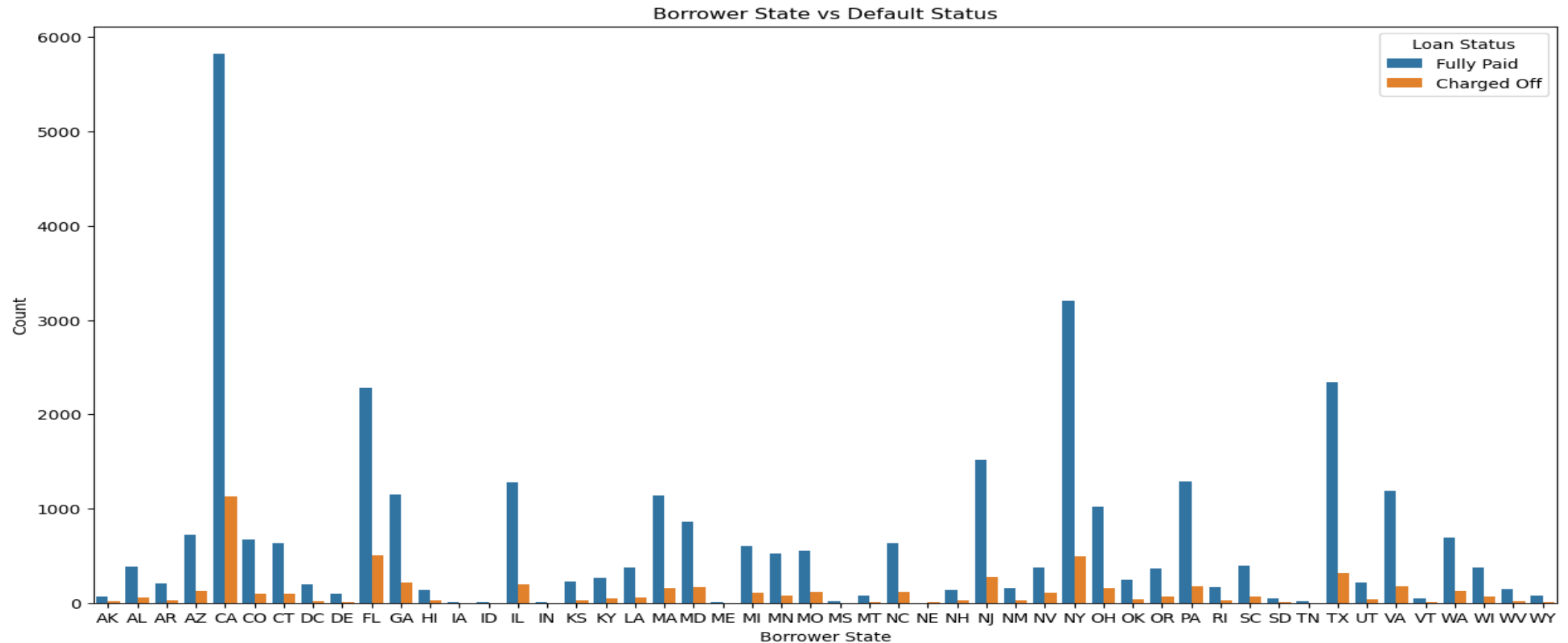# There is a higher frequency of default in loan grade D, E, F & G

There is a higher % of defaults in verified category compared t non verified category

It seems there is a high demand for loan for debt consolidation, the category has also highest no of defaults

There are high number of default cases reported from CA, FL and NY states

Borrower State vs Default Status

Final Conclusion

LendingClub has grown consistently over the period of years. However the defaults have also grown by the same rate. Few considerations that LC should have are as below:

- LendingClub should issue long term loans (60 months term) for Grade A cases only as other grades have higher tendency to default
- There is a higher tendancy to default when loan amount is hight. LC should perform higher due diligence in such cases
- Higher interest rates are levied to compensate for high risk loans. However there is a higher tendency to default when interest rates are higher. Implement stricter loan amount limits based on the borrower's income and credit history. Lower limits for those with lower incomes or poorer credit scores could reduce default rates.
- LC should perform higher due diligence for the loans issued to borrowers from CA, FL and NY