

# Lending Club Case Study

Group Members:

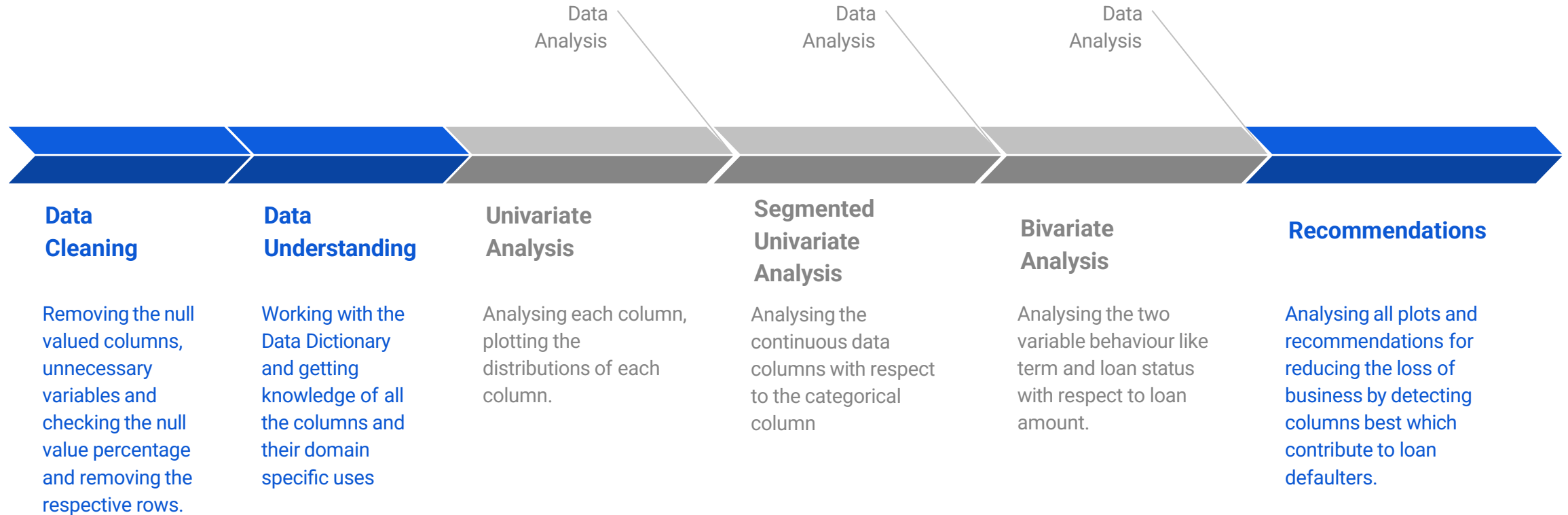
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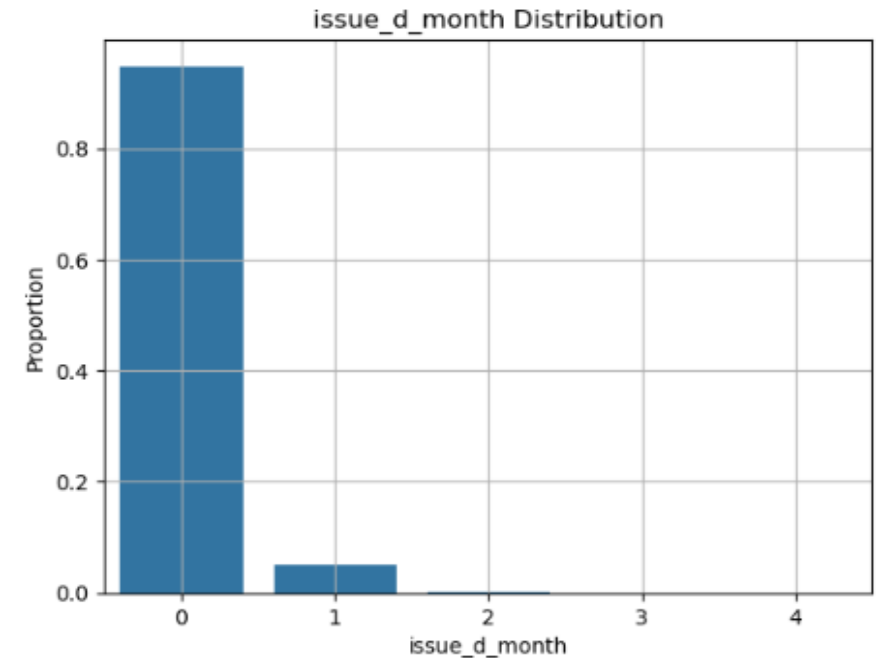
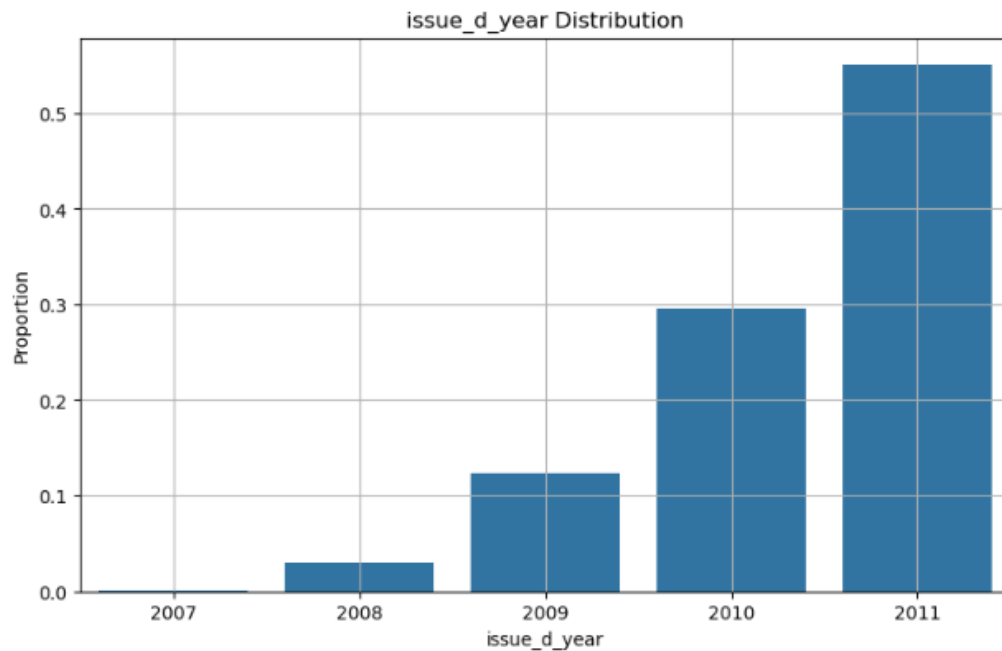
# The Problem:

COMPANY	CONTEXT	PROBLEM STATEMENT
<p>Lending Club is the largest online lending market place, facilitating personal loans and financing for medical procedure</p> <p>Borrowers can easily access lower interest rate loans through a fast online interface.</p>	<p>Lending Club wants to understand the <b>driving factors</b> behind loan defaults i.e. <b>driver variables</b> which are strong indicators of default.</p> <p>The company can utilize this knowledge for its portfolio and risk management.</p>	<p>As a data analyst working for Lending Club analyzing the dataset containing information about the past loans application using EDA to understand how consumer attributes and loan attributes influence the tendency for default.</p>

# Problem solving methodology



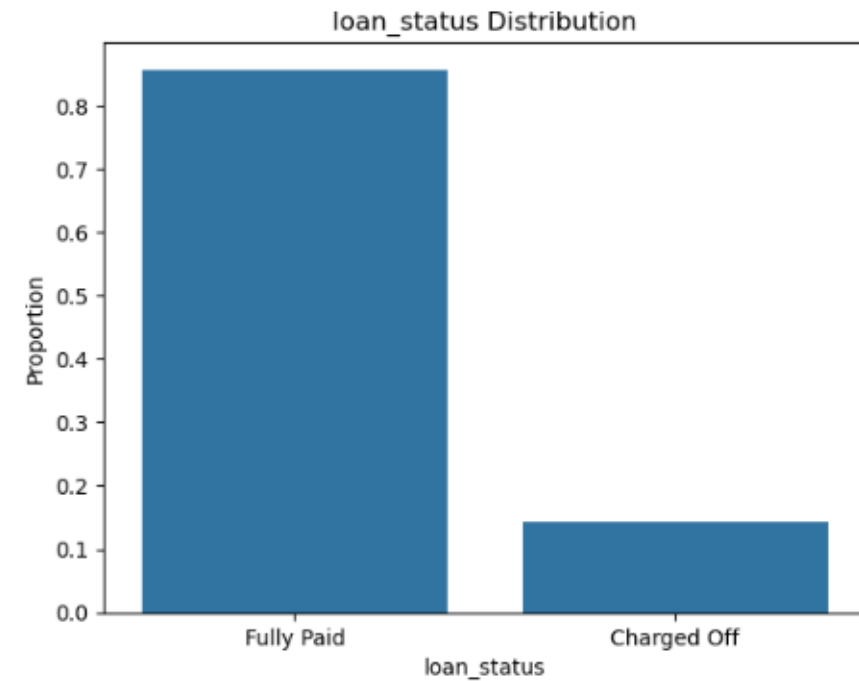
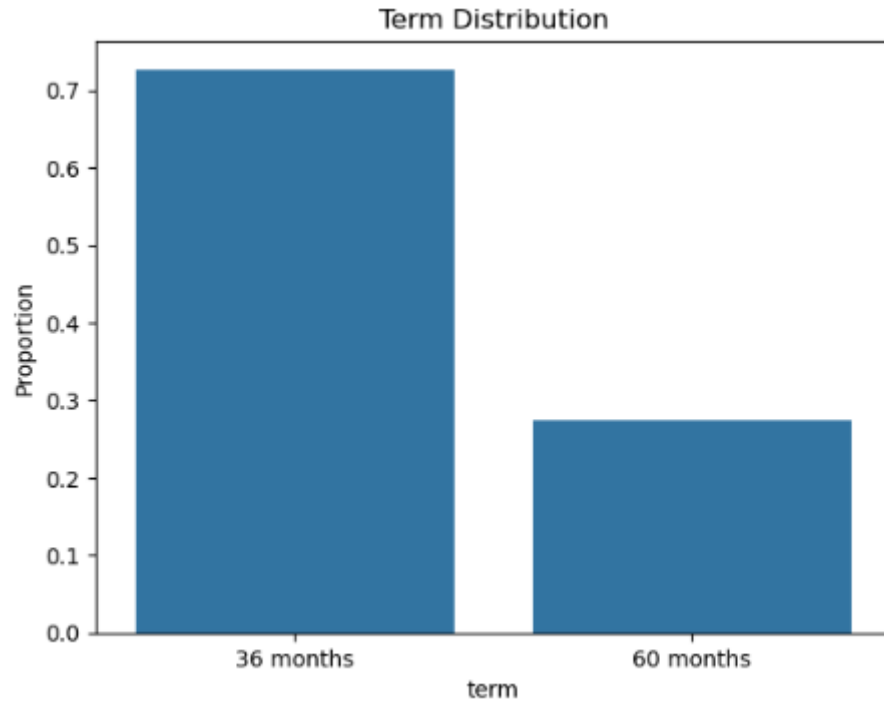
# Analysis



## Conclusion:

- The lending club(LC) has doubling loan issues every year
- There are more issues of loan in last 4 months every end of the ear i.e., Sep,Oct, Nov and Dec.

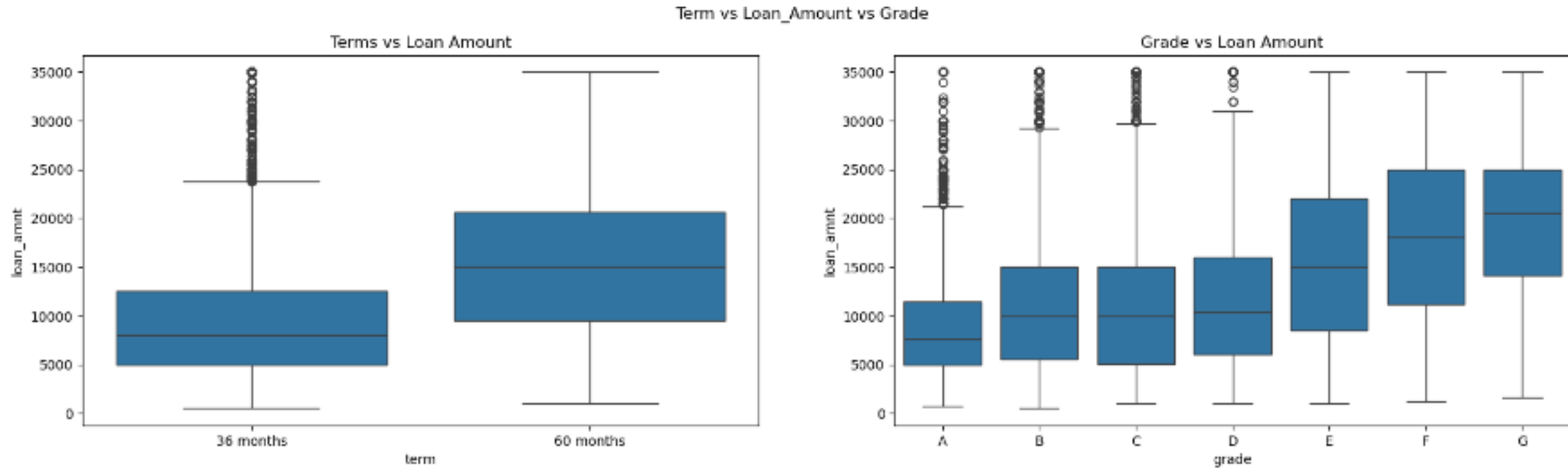
# Analysis



## Conclusion:

- Most Borrower's have taken loan for 36 months term.
- More than 80% have fully paid the loan.

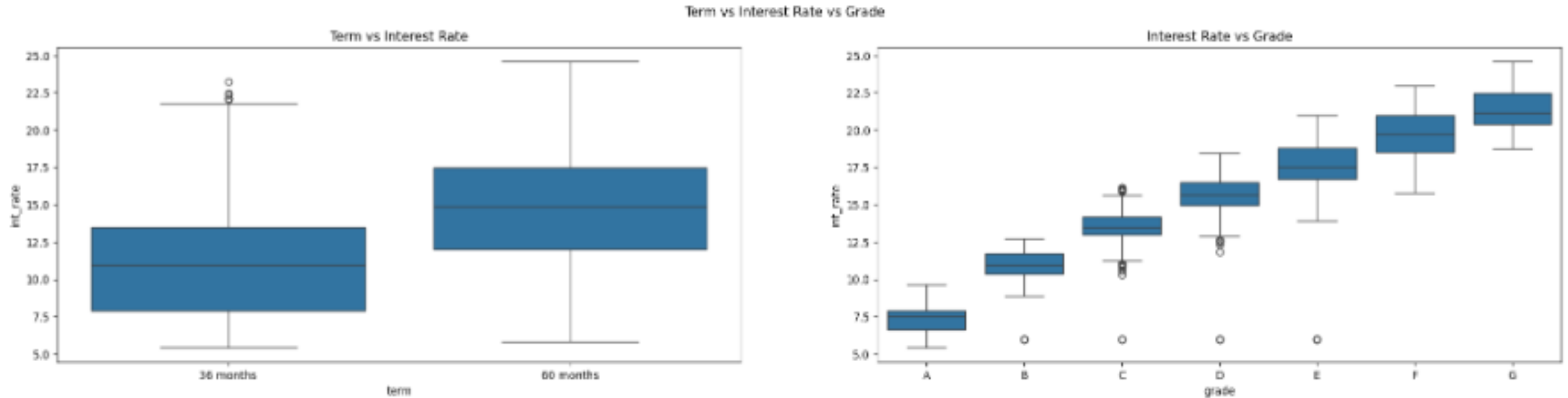
# Analysis



## Conclusion:

- Borrower's have opted 60 months terms for higher loan amount.
- As Grades are decreasing the loan amount is increasing. Grade 'A' has taken lowest amount of loan where as G has taken highest amount of loan.

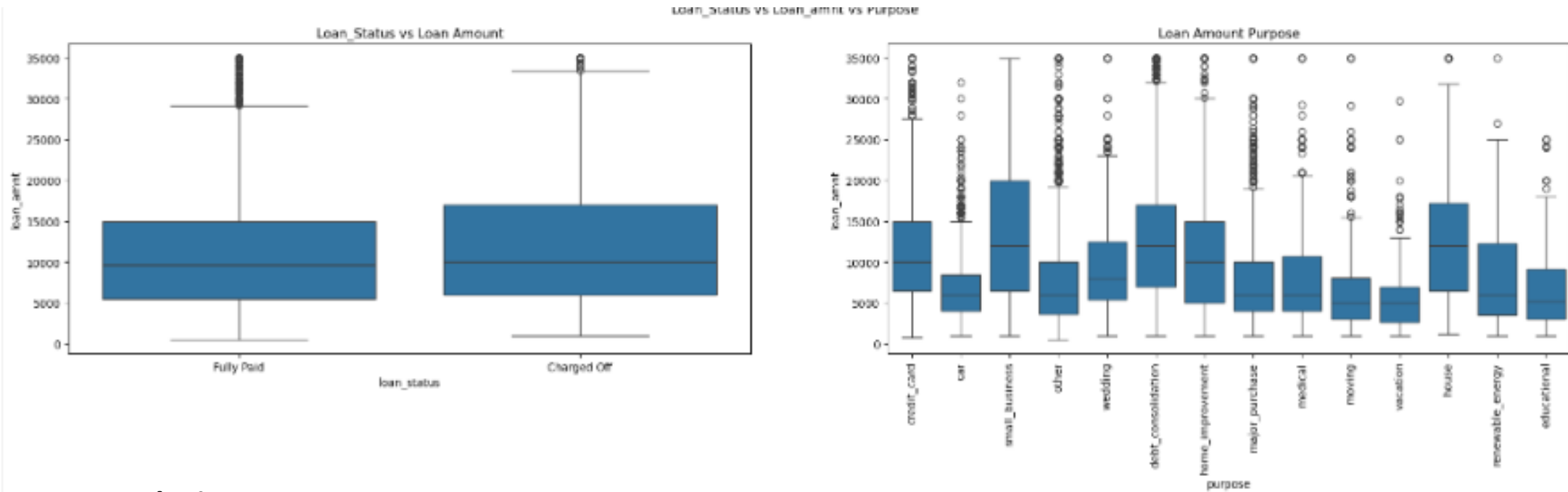
# Analysis



## Conclusion:

- Loan allocated for 60 Month tenure have higher interest rate.
- As the Grade have increased from (A to G), interest rate is also have increased.

# Analysis



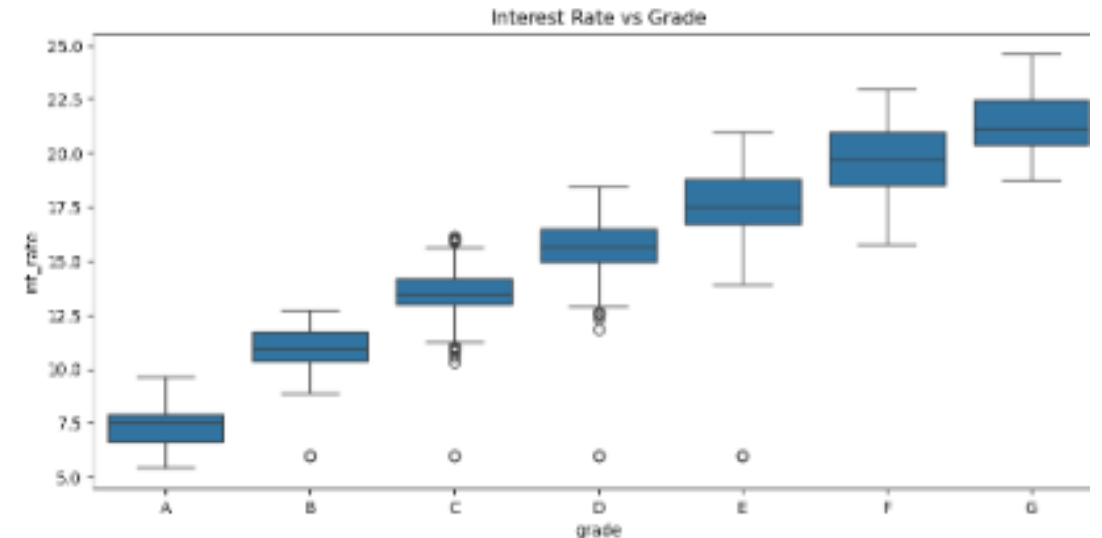
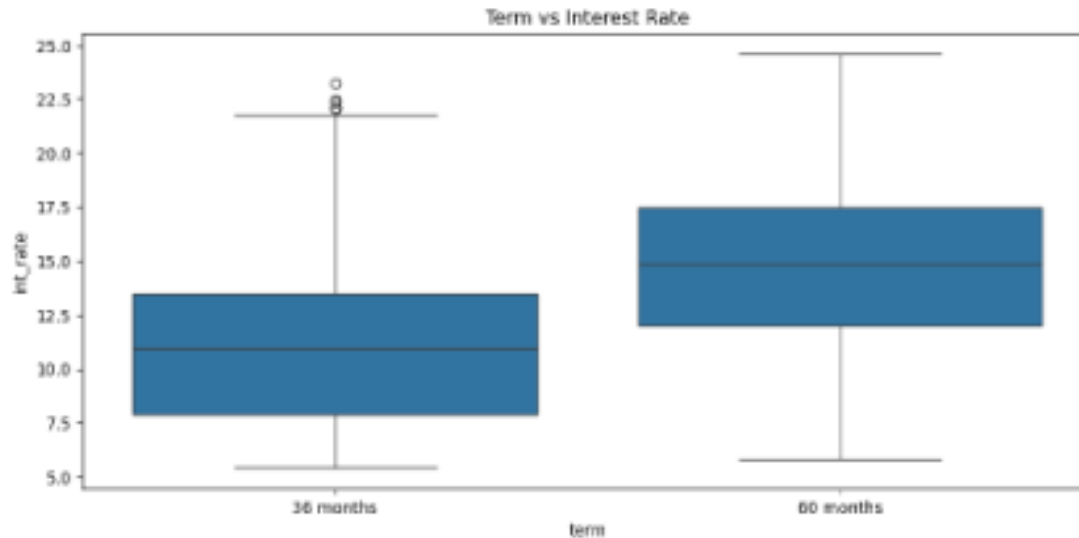
## Conclusion:

- Borrowers have taken higher amount of loan found to be Charged off(defaulted).
- Most of Borrowers have taken higher amount of loan for small\_businesses.



# Analysis

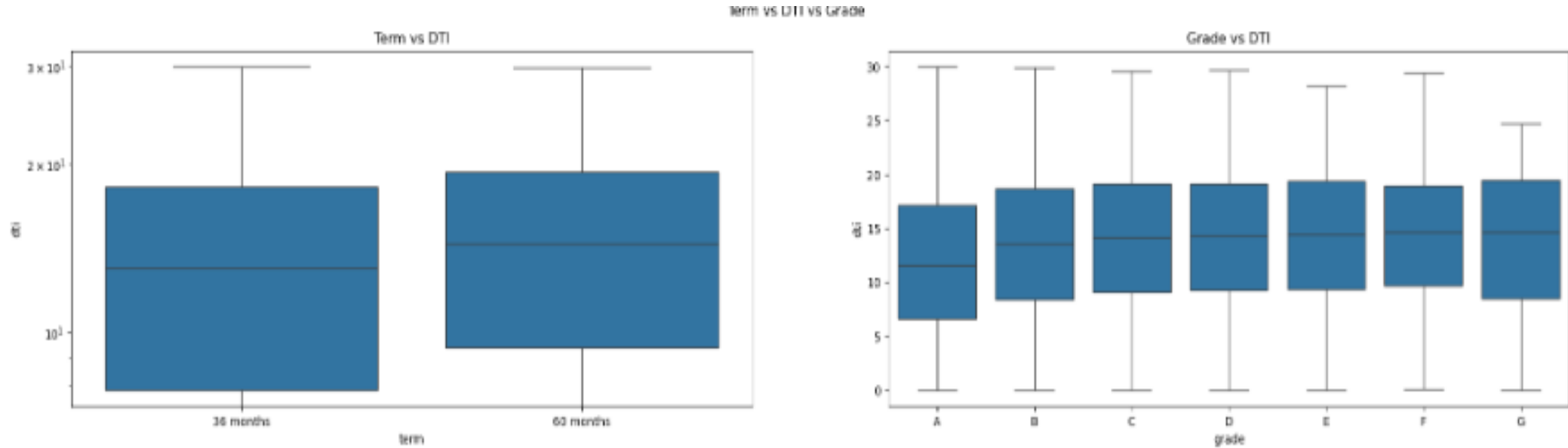
Term vs Interest Rate vs Grade



## Conclusion:

- Loan allocated for 60 Month tenure have higher interest rate.
- As the Grade have increased from (A to G), interest rate is also have increased.

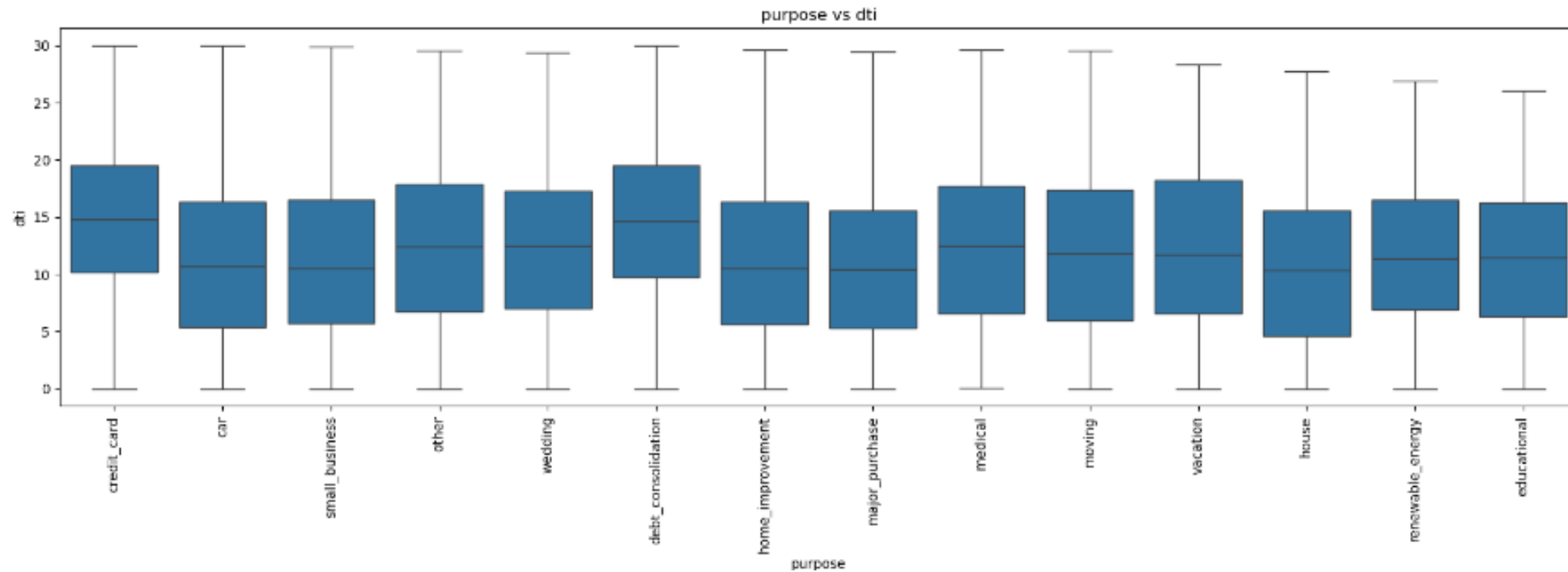
# Analysis



## Conclusion:

60 months term DTI for borrowers is bit higher.  
DTI for Grade 'A' seems low.

# Analysis



## Conclusion:

Credit card and Debt consolidation purpose has more DTI than other purposes.

## Conclusions

- Lending club should reduce the high interest loans for 60 months tenure, they are prone to loan default.
- Grades are good metric for detecting defaulters. Lending club should examine more information from borrowers before issuing loans to Low grade (G to A).
- Small business loans are defaulted more. Lending club should stop/reduce issuing the loans to them.
- Borrowers with mortgage home ownership are taking higher loans and defaulting the approved loans. Lending club should stop giving loans to this category when loan amount requested is more than 12000.