

LENDING CLUB CASE STUDY

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The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the left and right sides of the frame, creating a modern, architectural feel. The central area is a plain white space where the text is located.

A SMALL LOAN MAKES A DEPT;
A GREAT ONE MAKES AN
ENEMY”

- PUBLILIUS SYRUS

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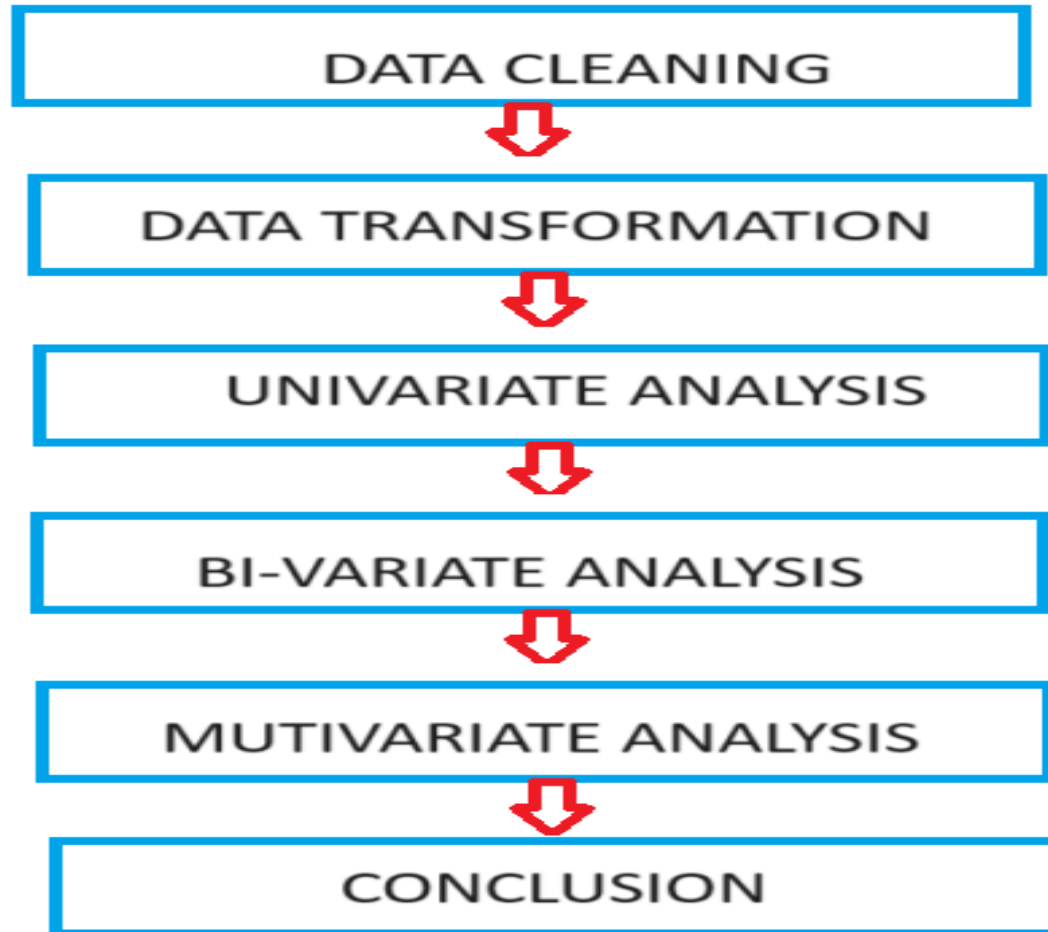
1. PROBLEM STATEMENT

- ▶ LendingClub is a prominent peer-to-peer lending platform that facilitates loans for individuals and small businesses.
- ▶ LendingClub collects a vast amount of data on loan applicants, investors, and loan performance.
- ▶ This data can be leveraged to improve the platform's efficiency, risk assessment, and investor experience.
- ▶ The main goal is to reduce credit loss

Objective

The objective of this project is to analyze LendingClub's loan data and address specific challenges or opportunities related to the platform's operations, risk management, or investor strategies.

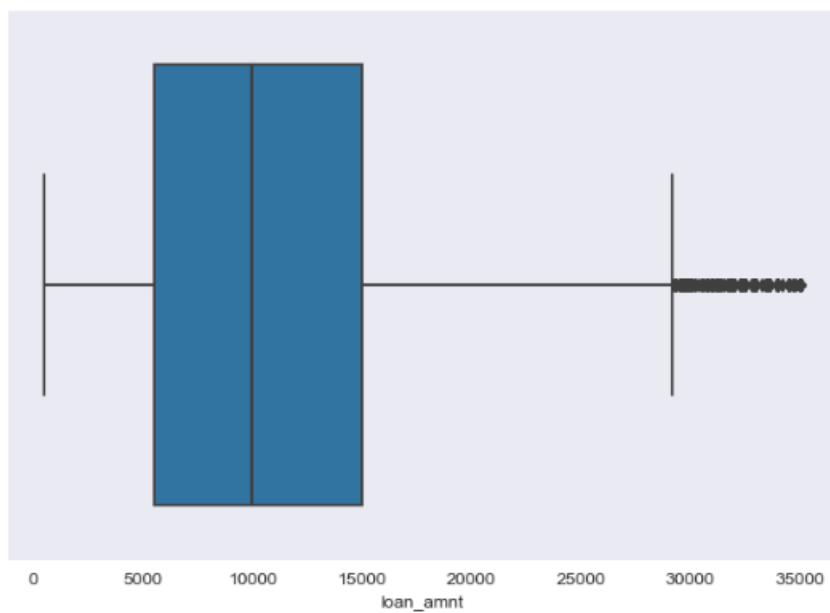
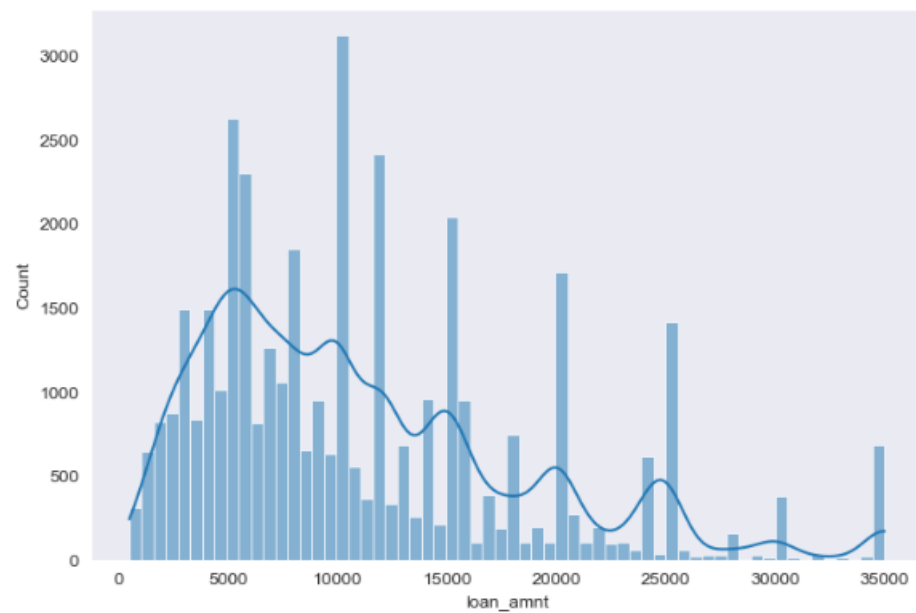
APPROACH



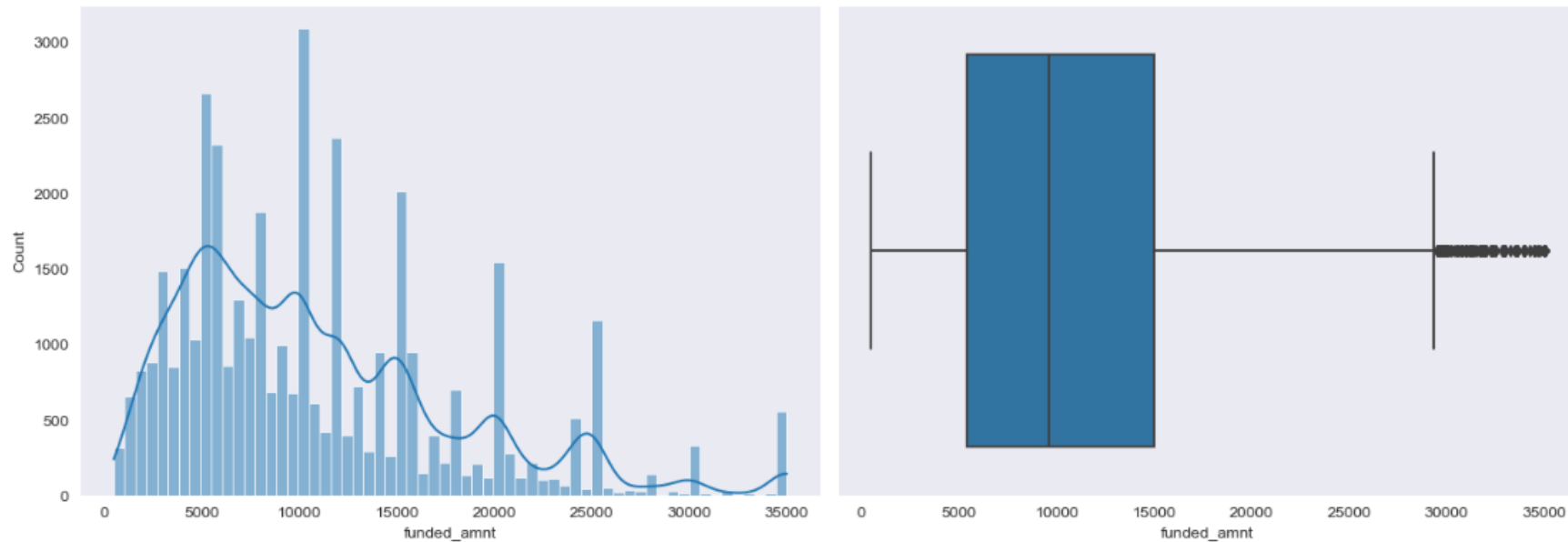
2.UNIVARIATE ANALYSIS

- **Univariate Analysis** is a type of data visualization where we visualize only a single variable at a time.
- It helps us to analyze the distribution of the variable present in the data

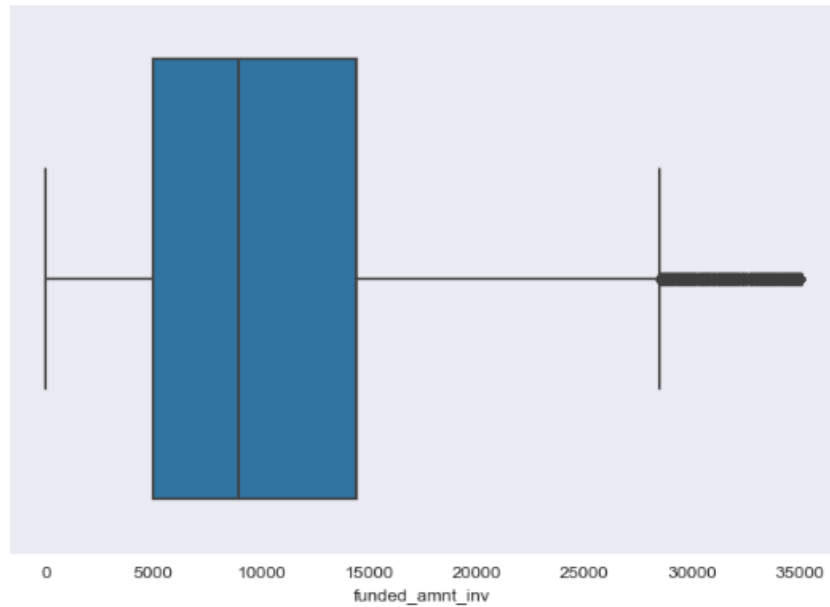
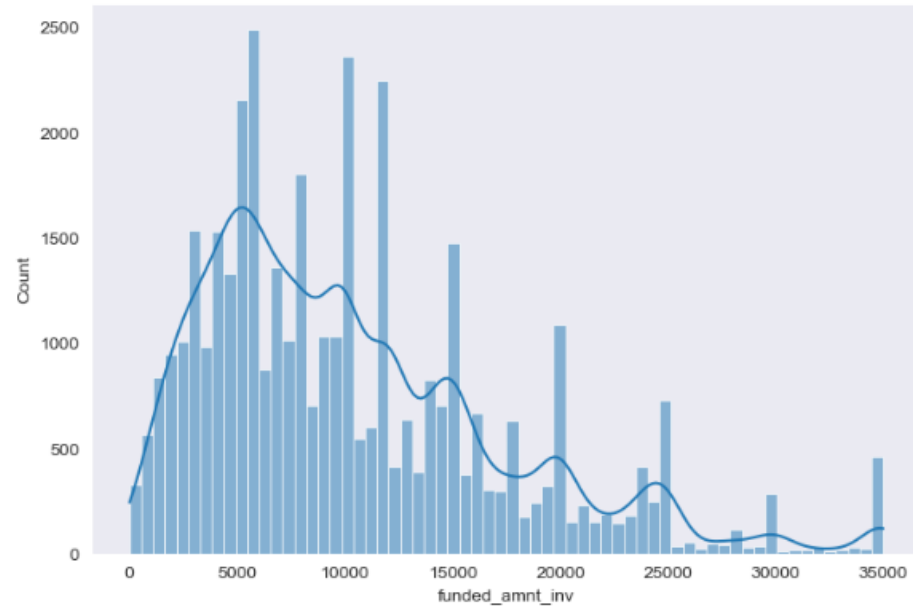
1. Loan amount



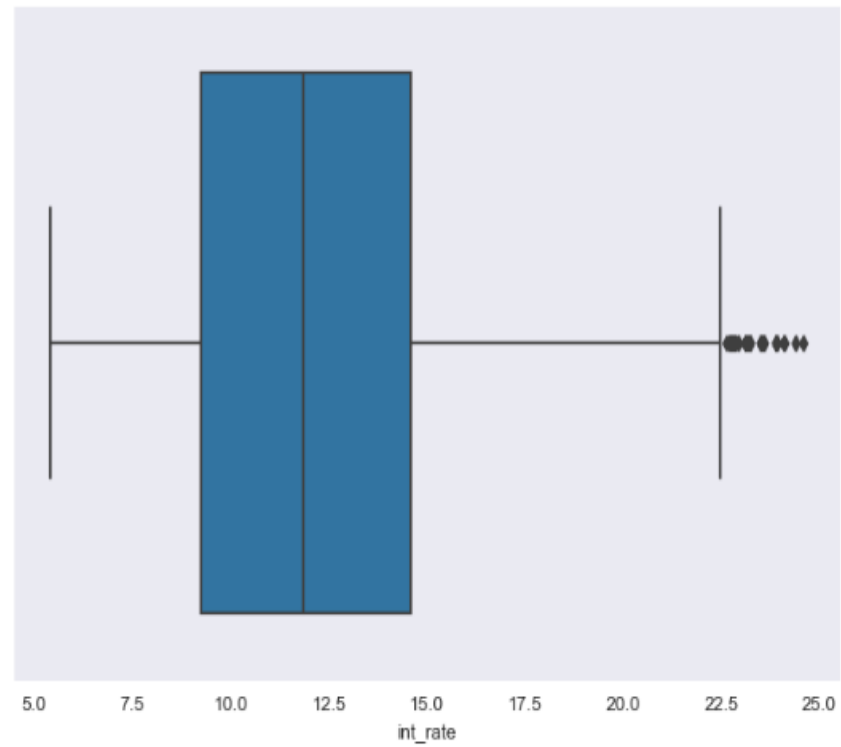
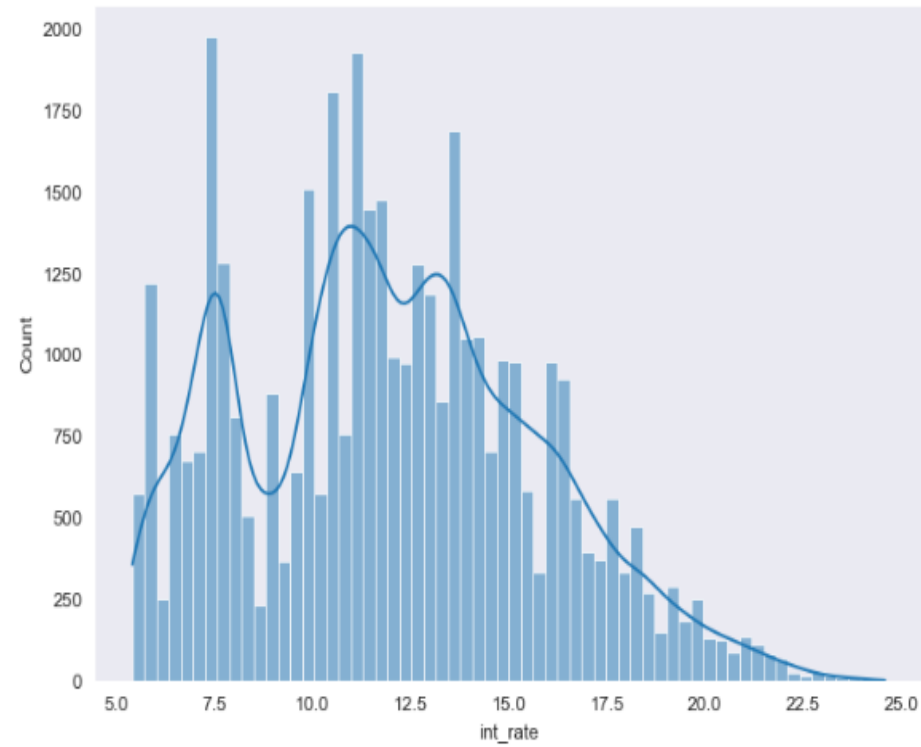
2. Funded amount - The total amount committed to that loan at that point in time.



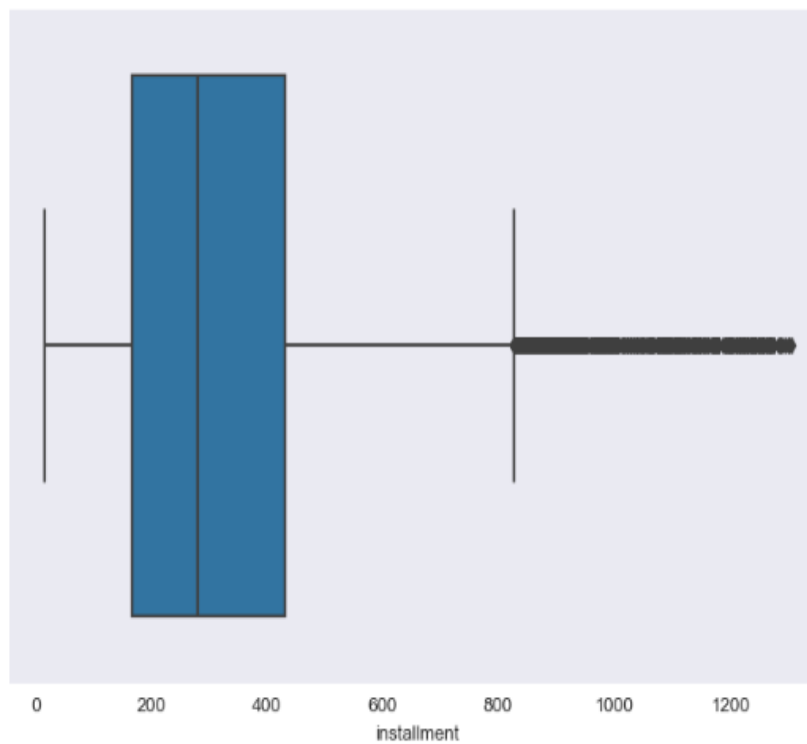
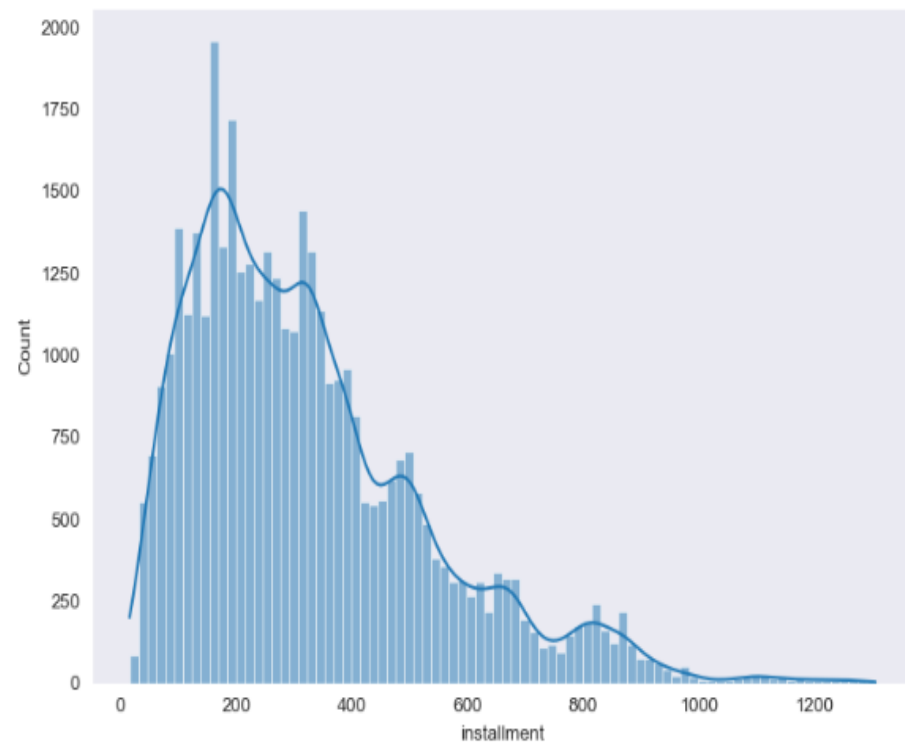
3. funded_amnt_inv - The total amount committed by investors for that loan at that point in time.



4.int_rate



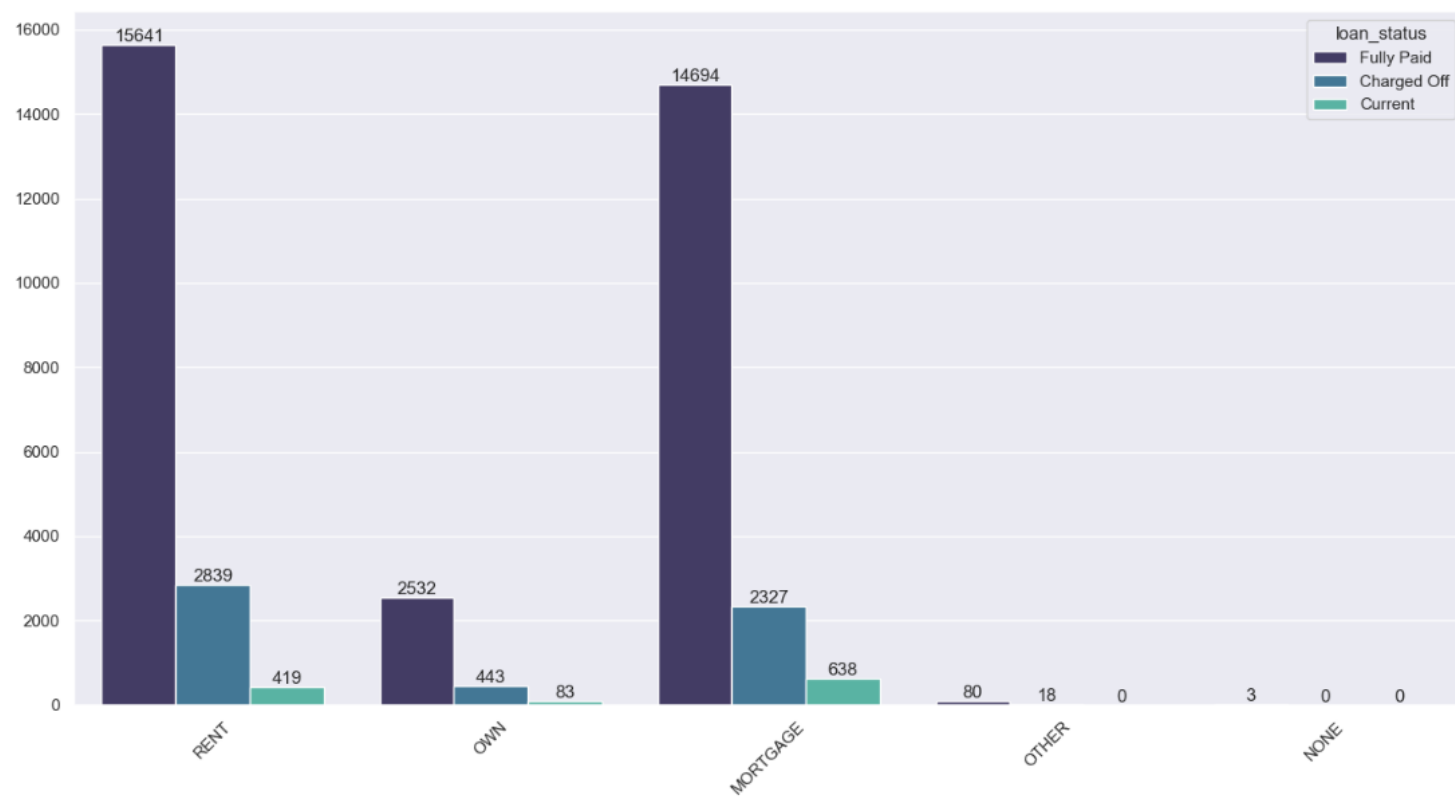
5.installment



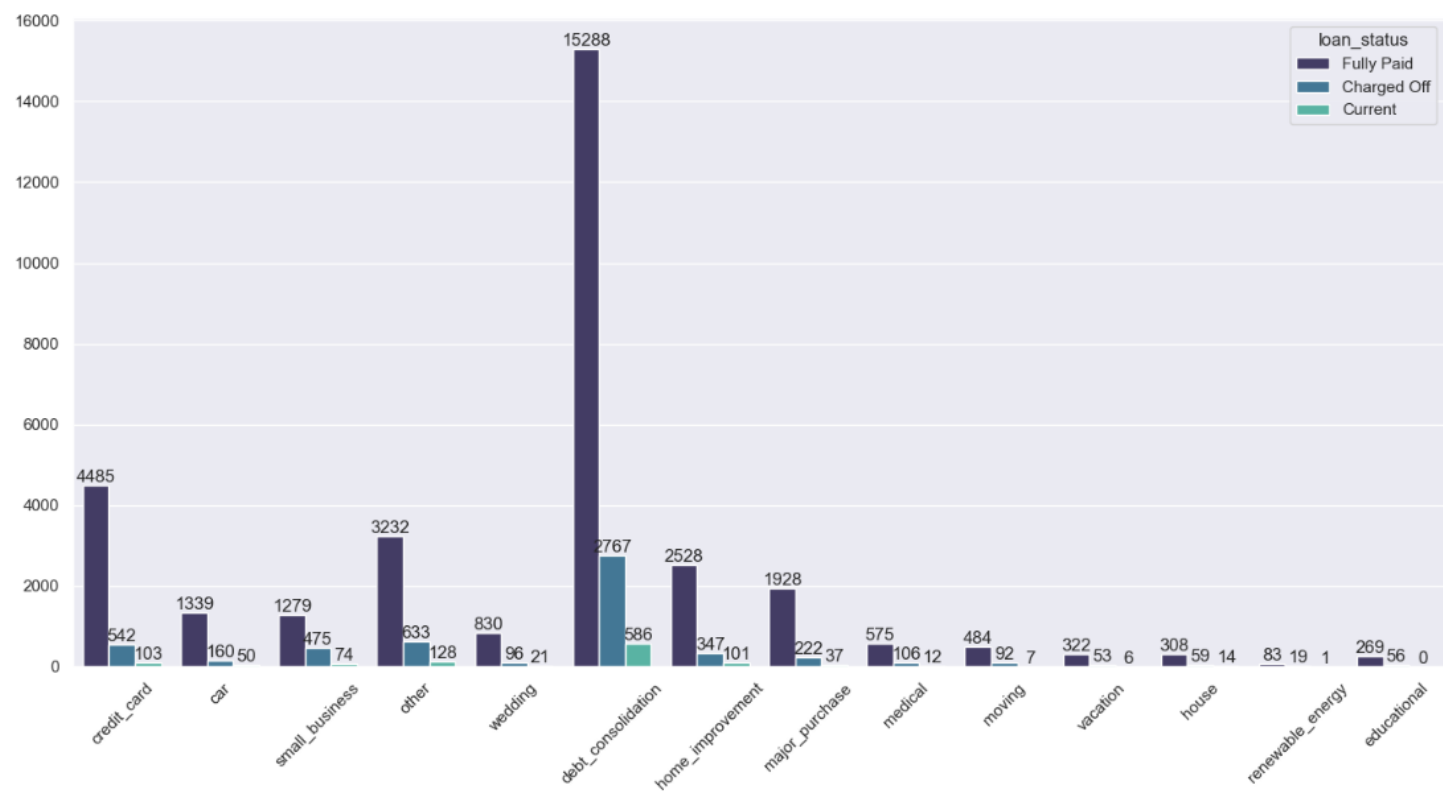
3. BI-VARIATE ANALYSIS

- ▶ **Bivariate analysis** is one of the simplest forms of quantitative analysis
- ▶ It involves the analysis of two variables
- ▶ It can help determine to what extent it becomes easier to know and predict a value for one variable (dependent variable) if we know the value of the other variable (independent variable)

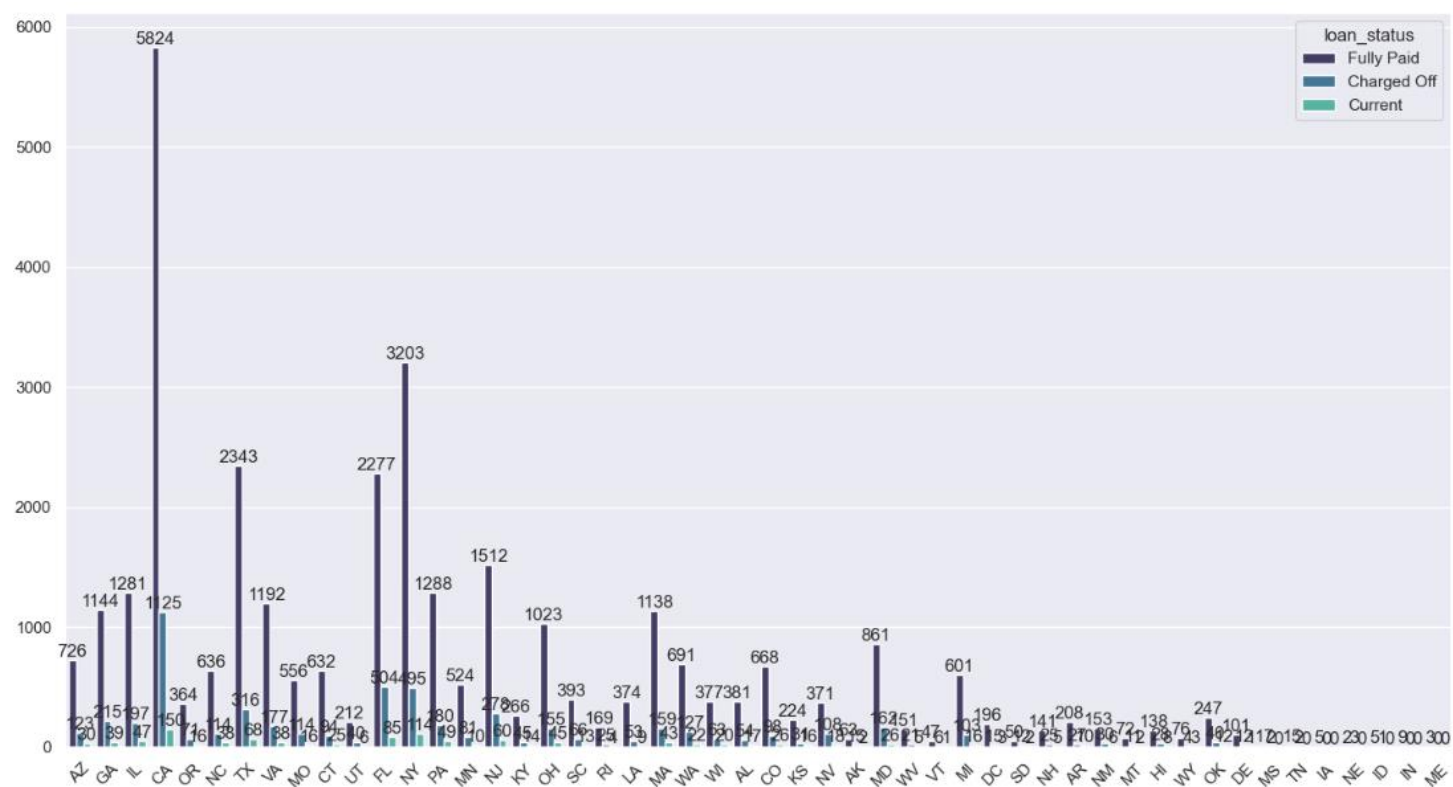
1.Home Ownership with Loan Status



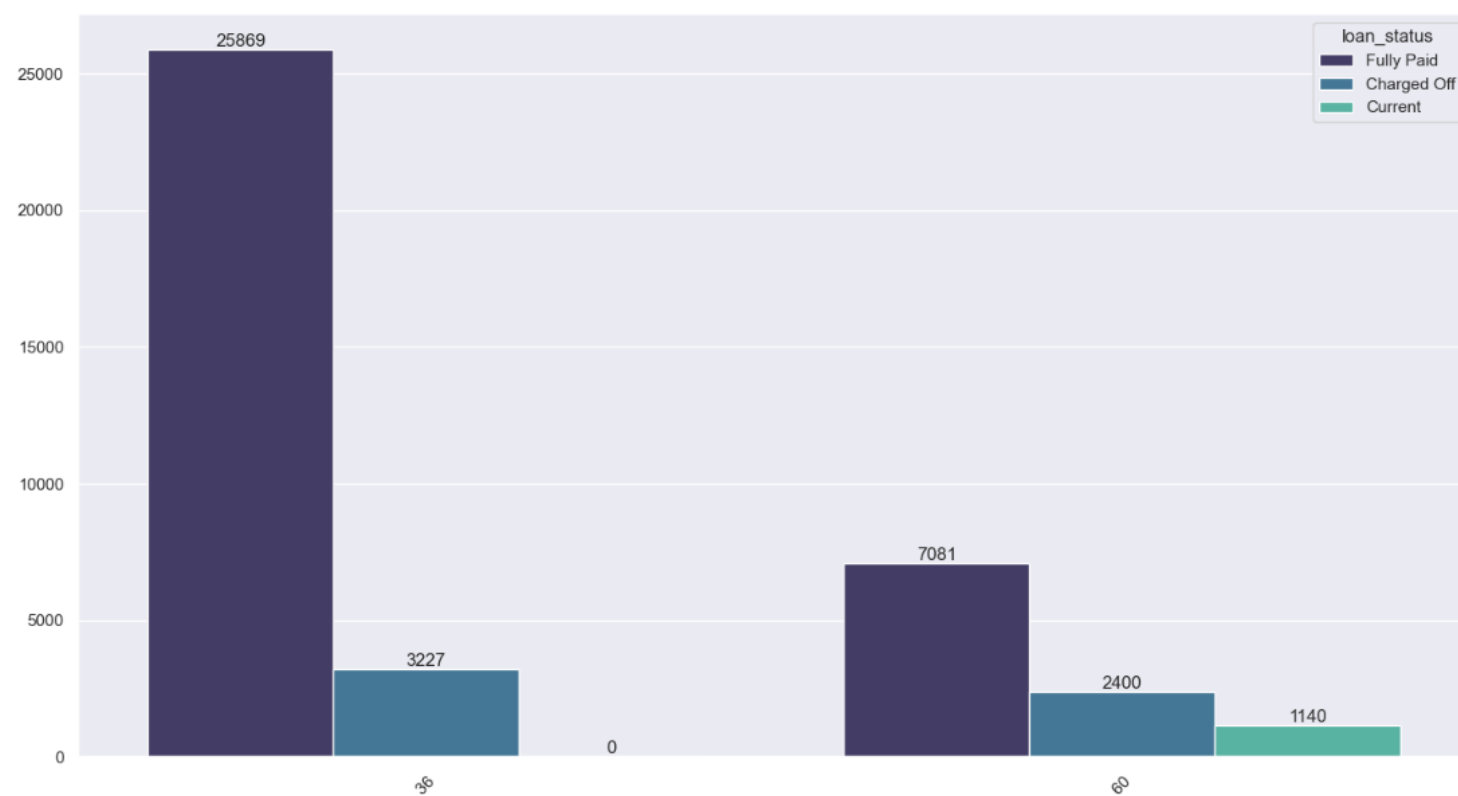
2. Purpose with Loan Status



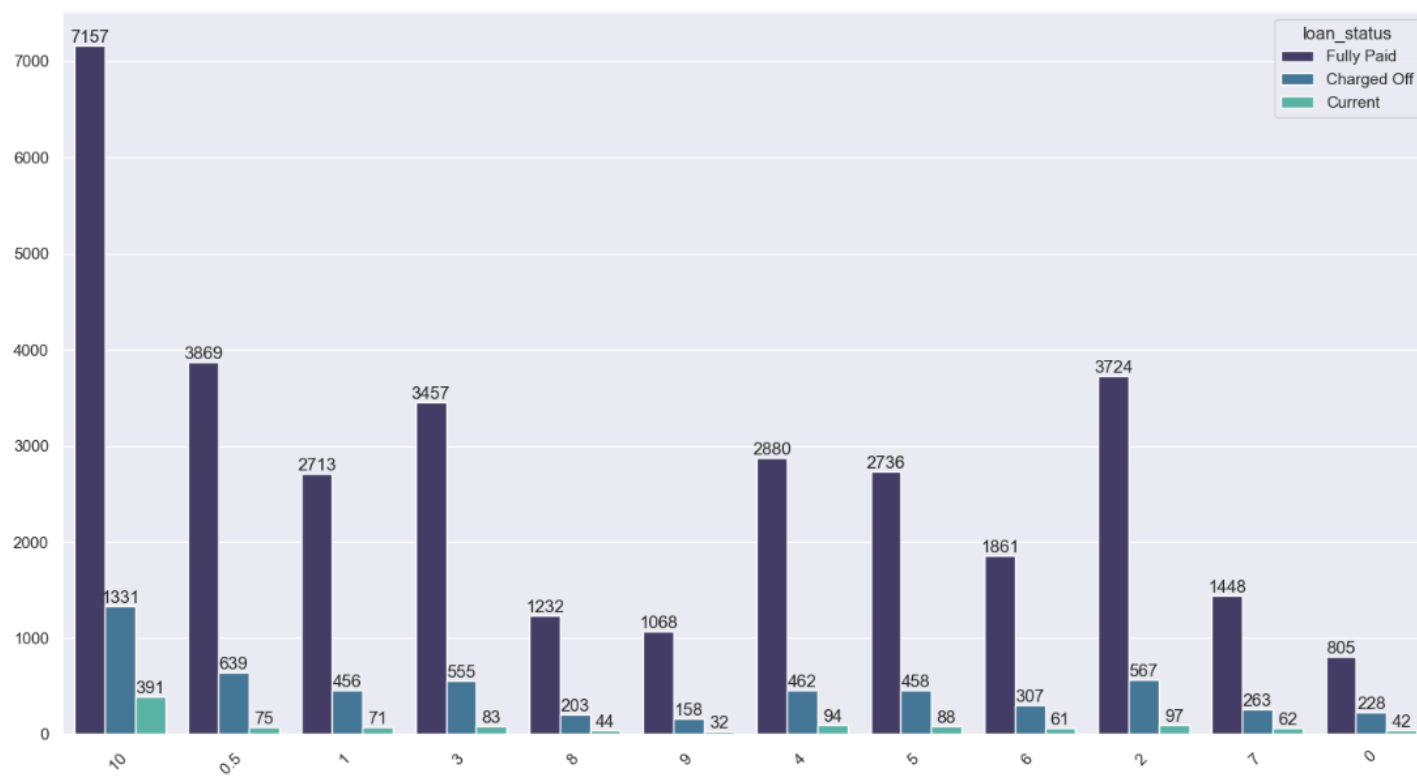
3.Address state with Loan Status



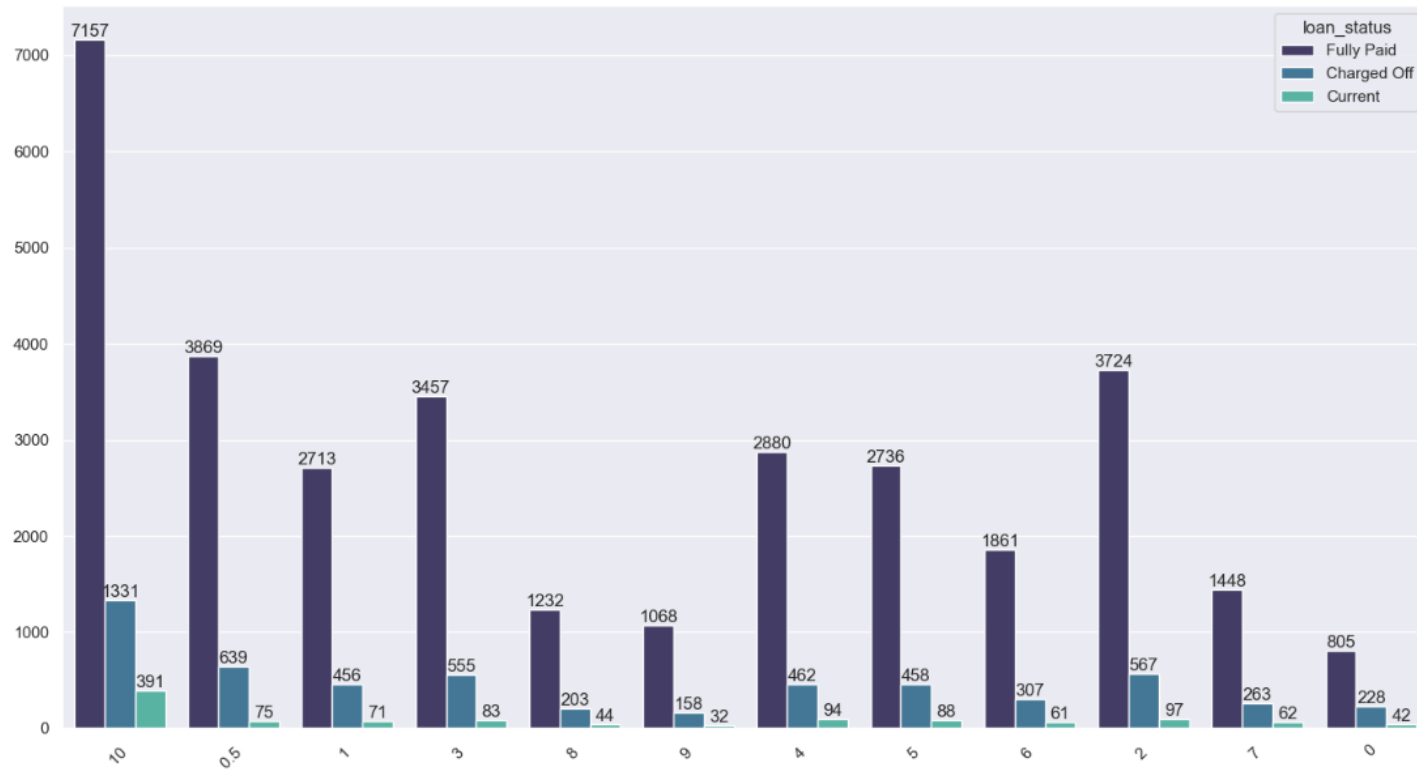
4.term with Loan Status



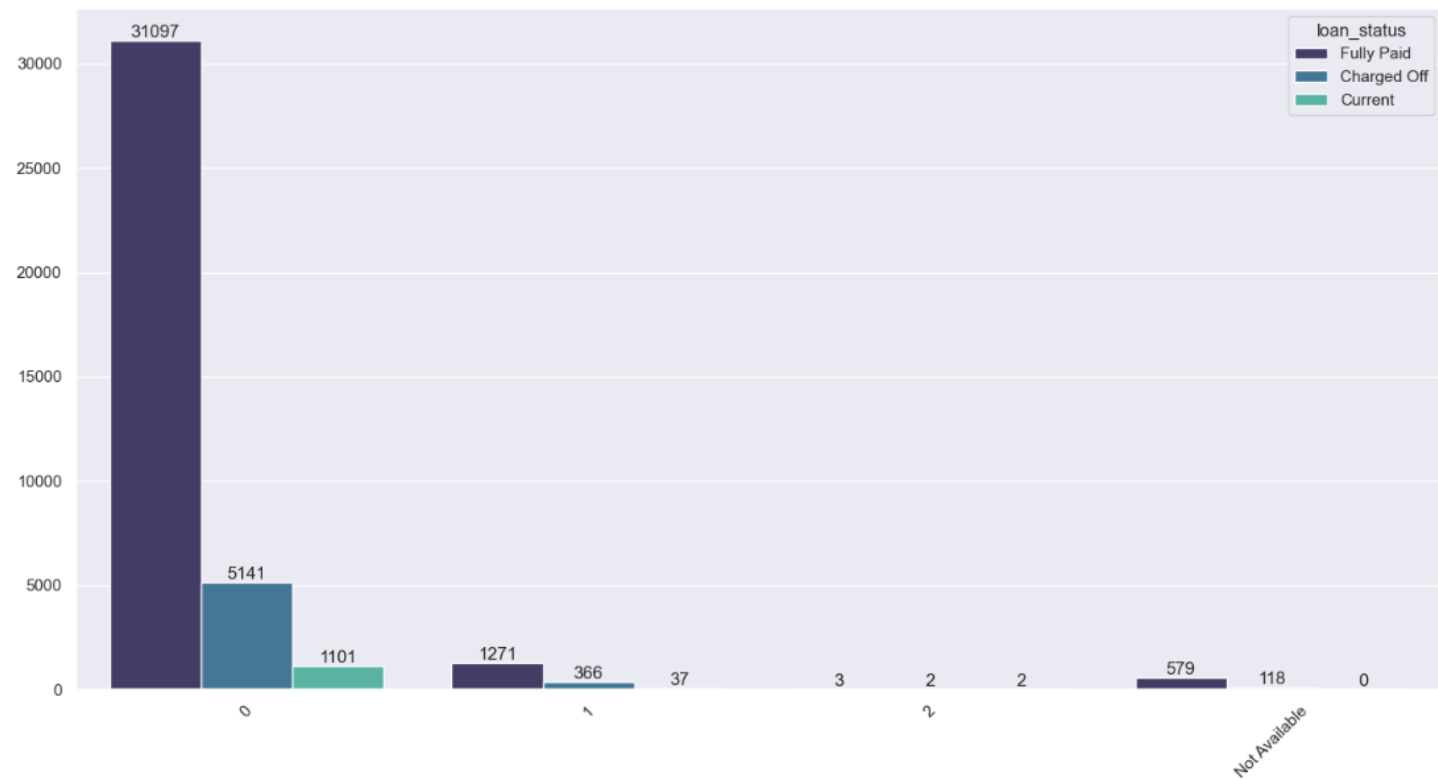
5.grade with Loan Status



6.emp_length with Loan Status



7.pub_rec_bankruptcies with Loan Status

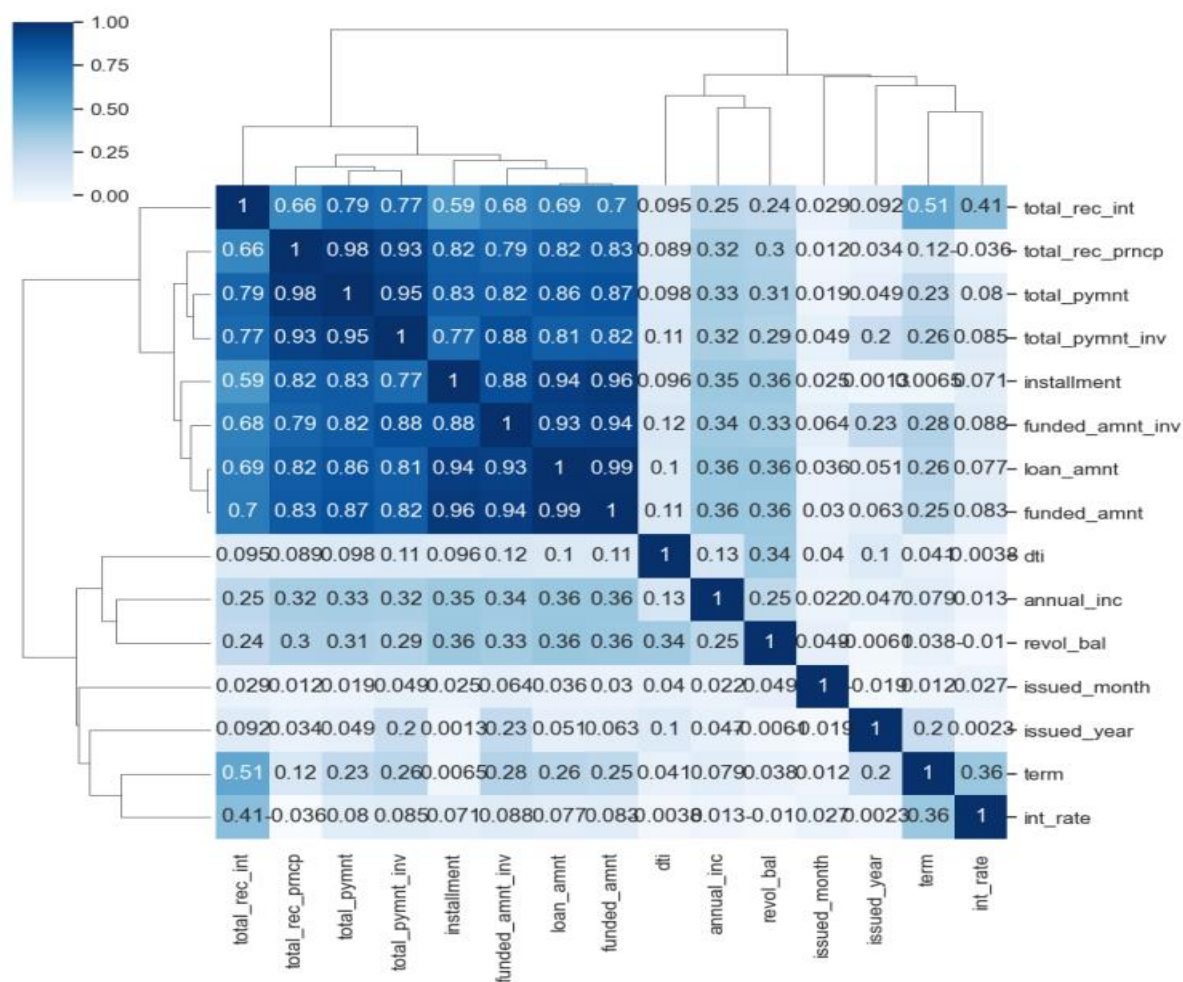


4. MULTIVARIATE ANALYSIS

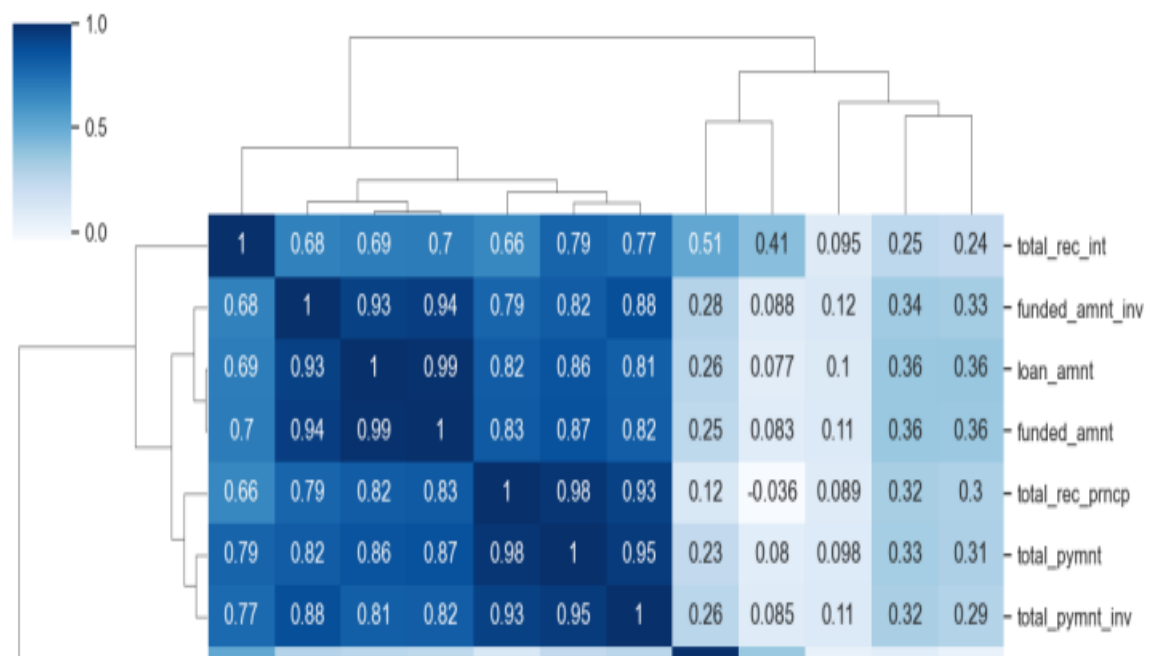
- ▶ Multivariate analysis is a statistical technique used to analyze data that contains more than two variables.
- ▶ Multivariate analysis allows you to find patterns between variables, helping you better understand the effects that different factors have on each other and the relationships between them.
- ▶ It represents a critical tool for marketers looking for ways to get deeper insight into the outcome of campaign decisions.

Correlation Analysis

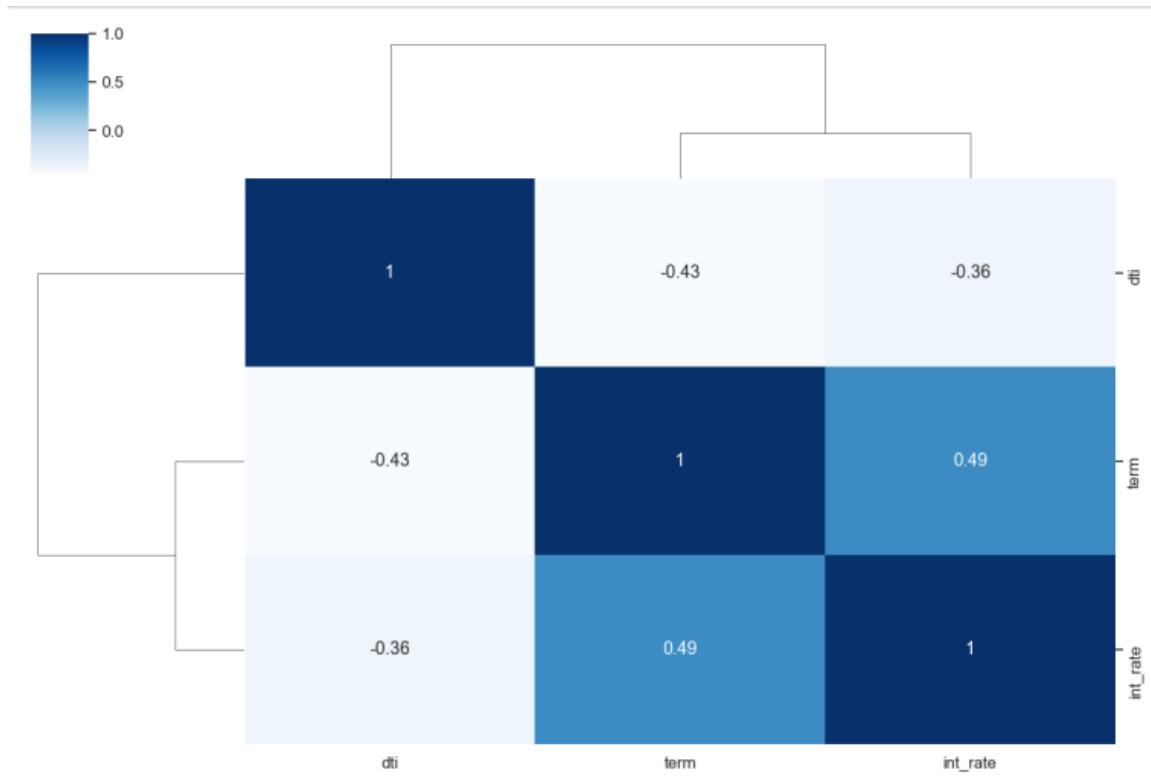
creating correlation



Data Cleaning



Analysis



5.CONCLUSION

The findings from this case study can serve as a guide for informed decision-making and the implementation of best practices in the lending industry. Adhering to these key principles can lead to sustainable growth and success in the highly competitive and dynamic loan market."