



LENDING CLUB CASE STUDY

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Who is Lending CClub ?

This company is the largest online loan marketplace, facilitating personal loans, business loans and financing of medical procedures. Borrowers can easily access lower interest rate loans through a fast online interface.



Objectives

Mission



Identify Risky loan applicants who can cause credit loss to the company.

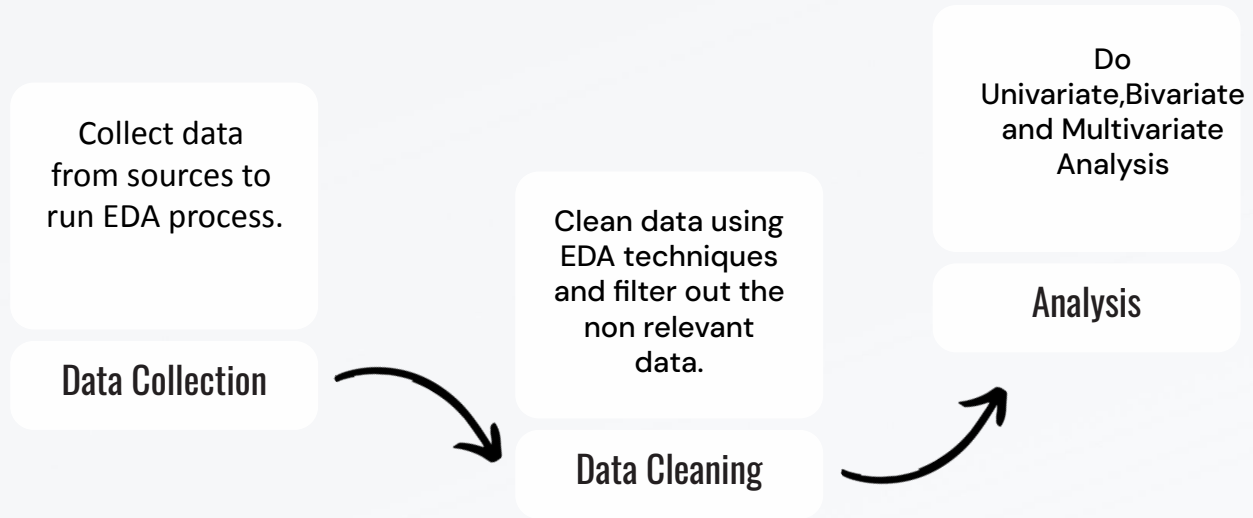
Conduct the EDA process to filter out the risky applicants. Understand the driving factors behind loan default.

Vision



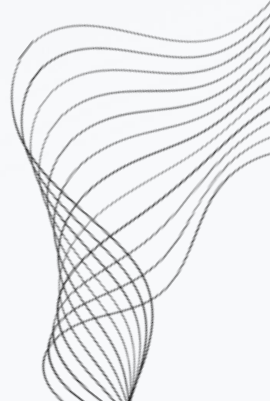
Methodology

Run the Exploratory Data Analysis process to identify the patterns which can lead to defaulters.

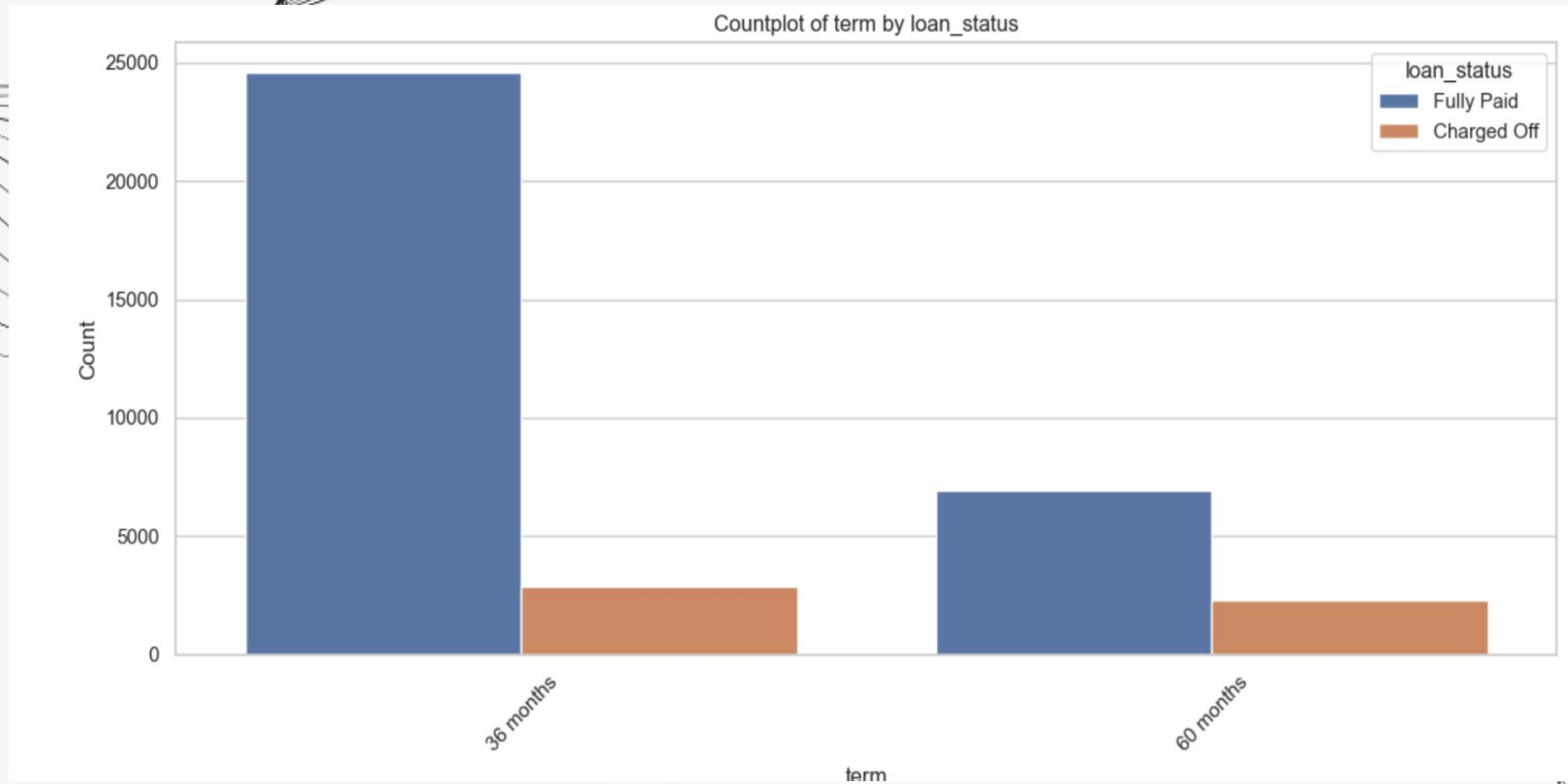




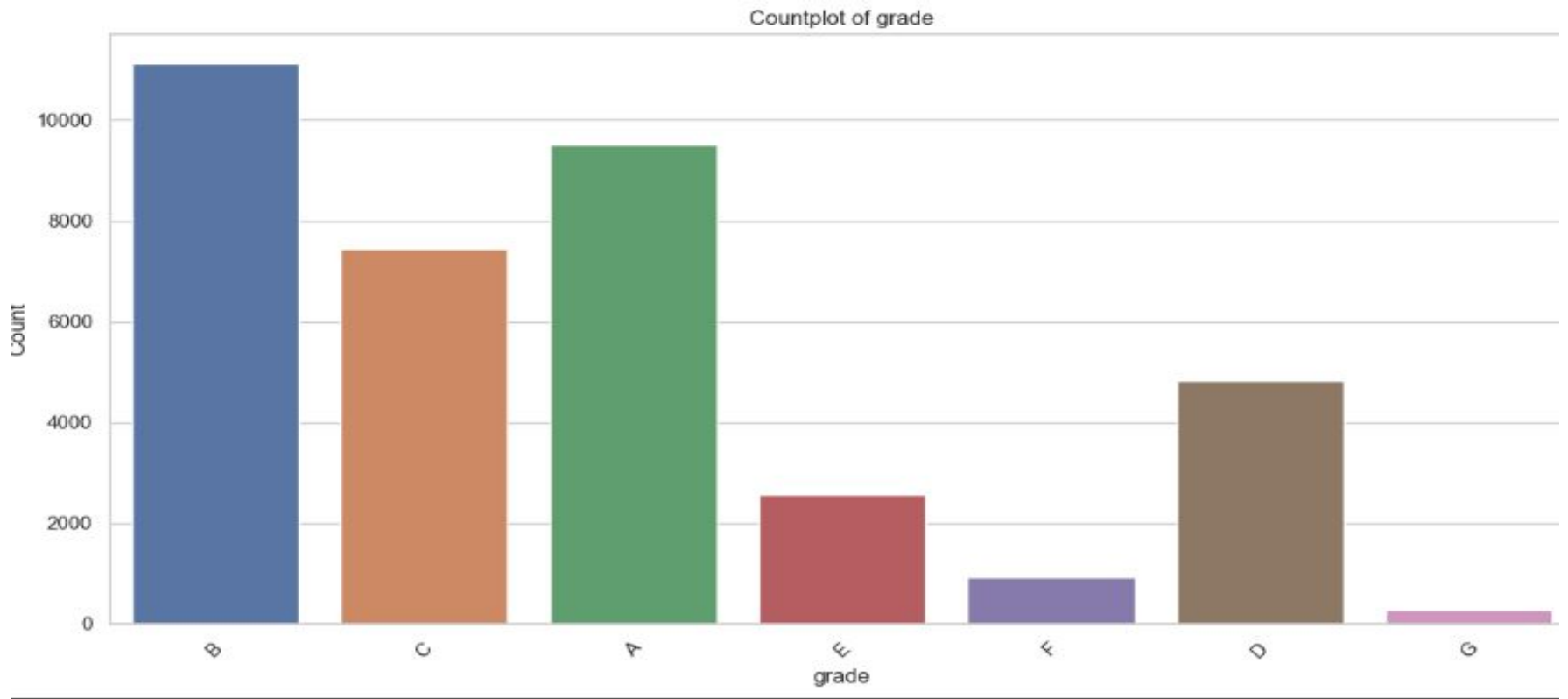
Data Cleaning

- Run the missing value check using python lang.
 - Remove columns with NA.
 - Remove columns with higher percentage of missing data.
 - Impute columns with low percentage of missing data.
 - Remove rows with low percentage of missing values.
 - Remove all columns with value zero.
 - Drop less meaningful columns for data analysis.
 - Fix Object Datatypes.
 - Segregate data based on numerical and categorical values.
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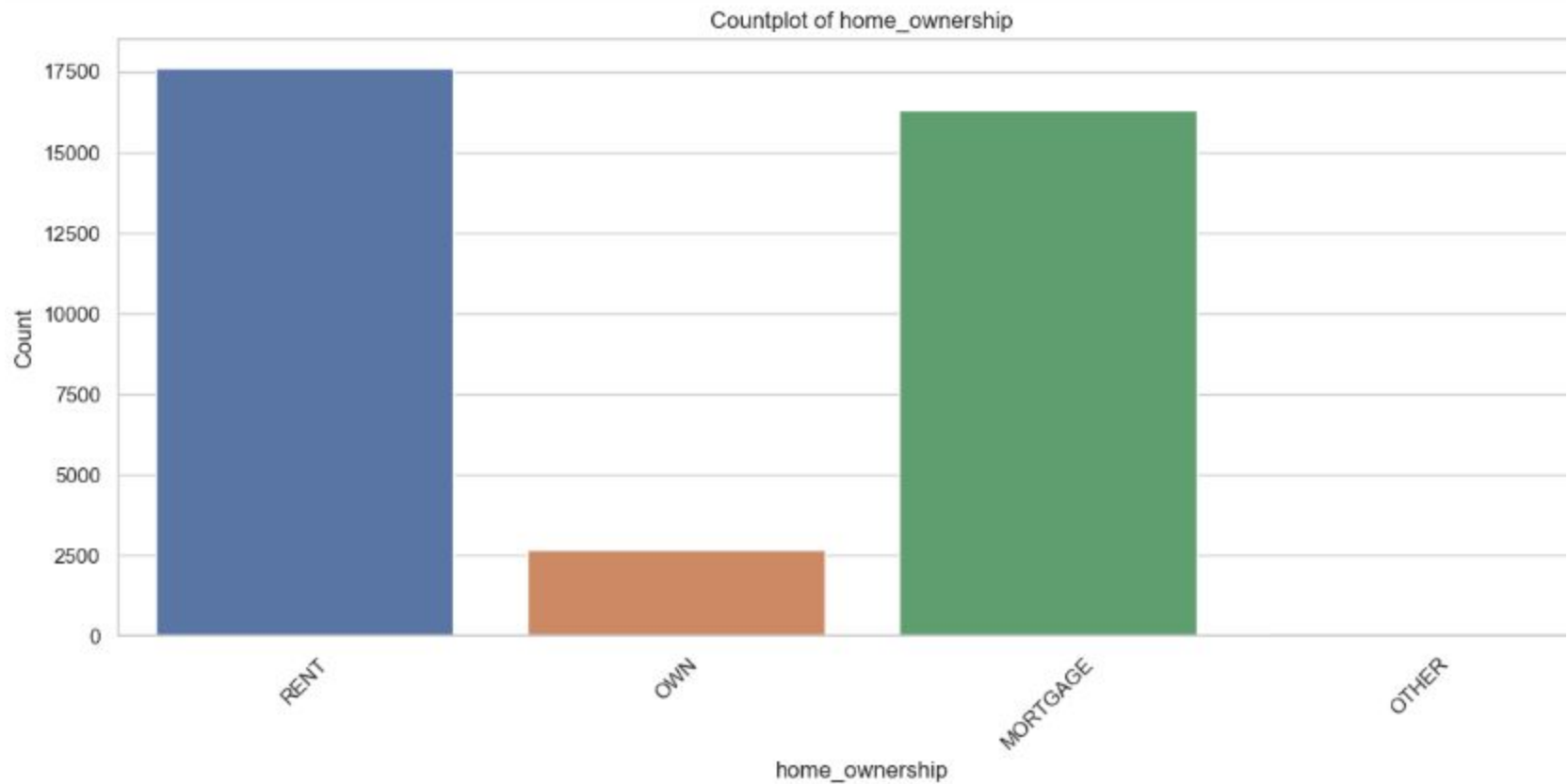
Data Analysis



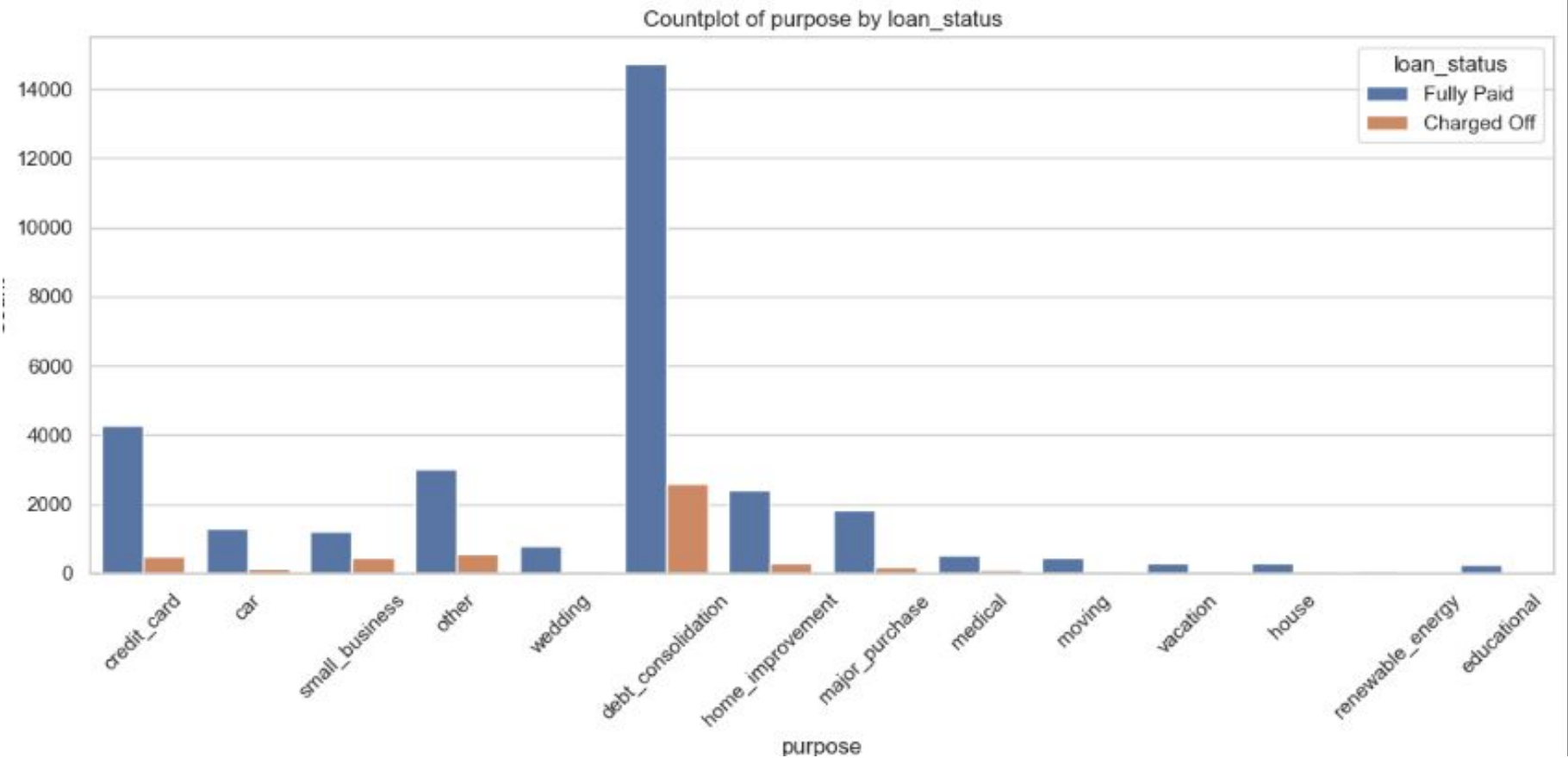
Charged off loans are more prevalent for 60-month loan durations compared to 30-month durations.



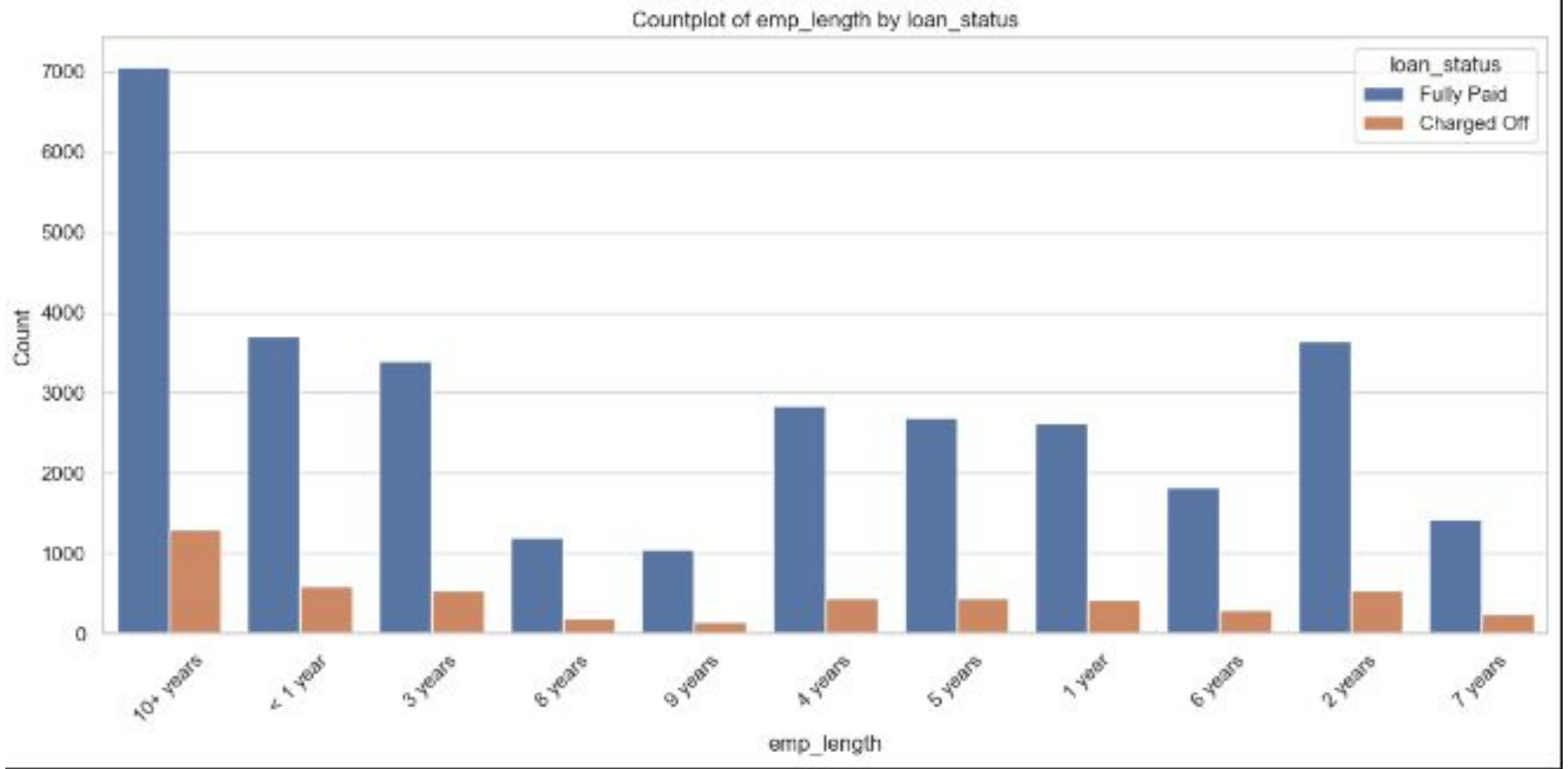
Based on the graph it is evident that loan grades, as assigned by LC, follow a distribution where grade B exhibits the highest frequency, followed by grade A, and grade C. This suggests that a significant portion of loans fall within the B grade category, with fewer loans categorized under grade A and even fewer under grade C.



Based on the graph, the count of loans is highest among individuals who have a mortgage, followed by those who rent, with the fewest loans among homeowners. The data underscores a trend where mortgage holders and renters are more likely to access financing compared to homeowners, reflecting varying financial needs and access to credit based on housing status.



The primary purpose of loans appears to be debt consolidation, while credit card payments constitute the second highest category of loans charged off. This indicates a prevalent use of loans to manage existing debts and credit obligations among borrowers.



Loans paid off by employees with 10+ years of tenure show the highest frequency compared to those with shorter tenures.

Installment and total payment amounts exhibit the strongest correlation with loan amounts across the dataset.



THANK'S

