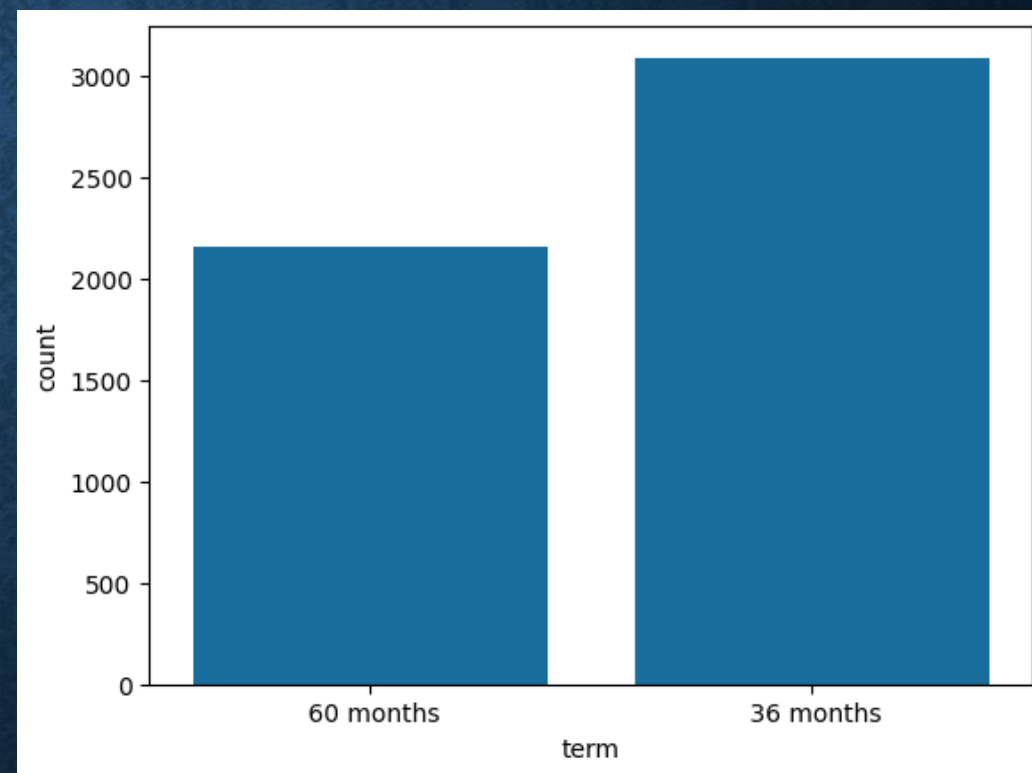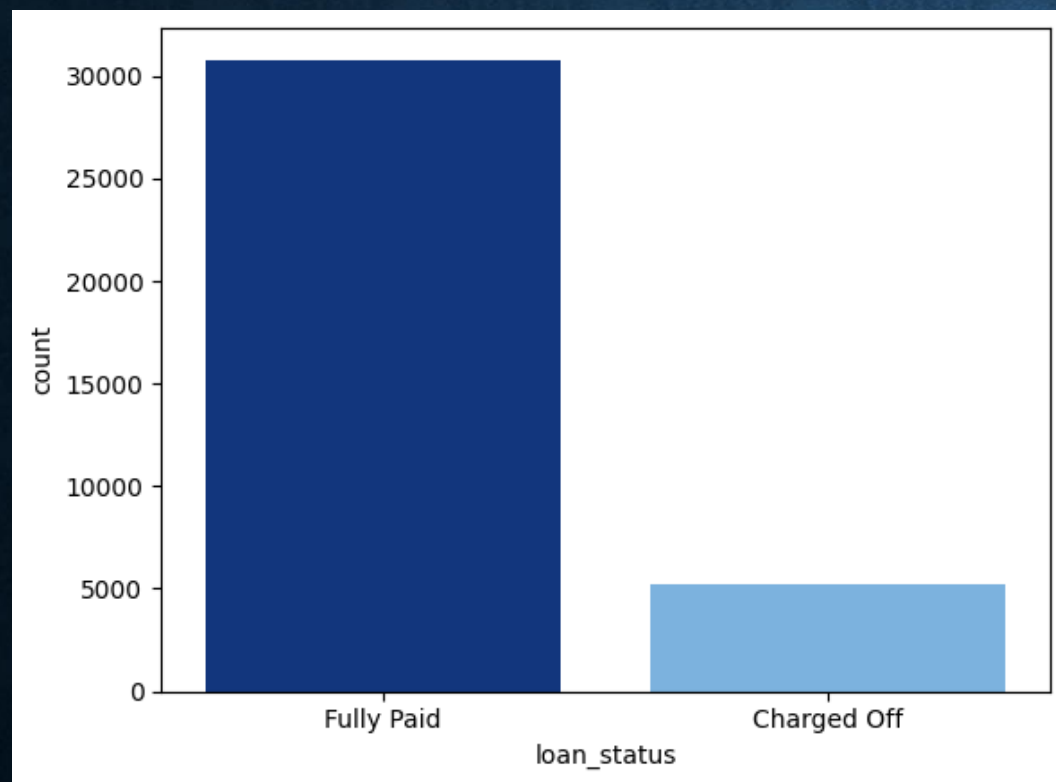# LENDING CLUB CASE STUDY

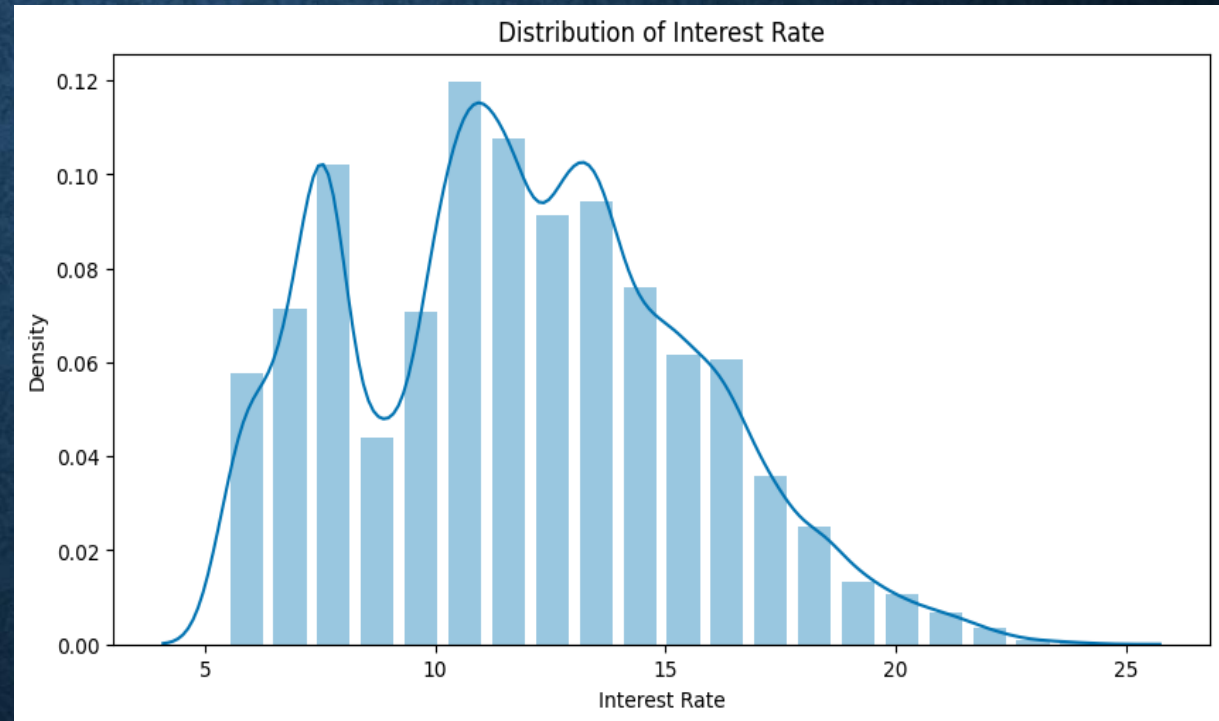Vineet Tiwari

BUSINESS CASE UNDERSTANDING

- A business case for loan data analysis involves presenting a compelling argument for utilizing data analysis techniques to make informed decisions about lending practices.

- Every time they receive a loan application, the company's goal is to decide whether to approve or deny it based on a number of factors.

- Identify the specific challenges or opportunities in the lending process that necessitate data analysis.
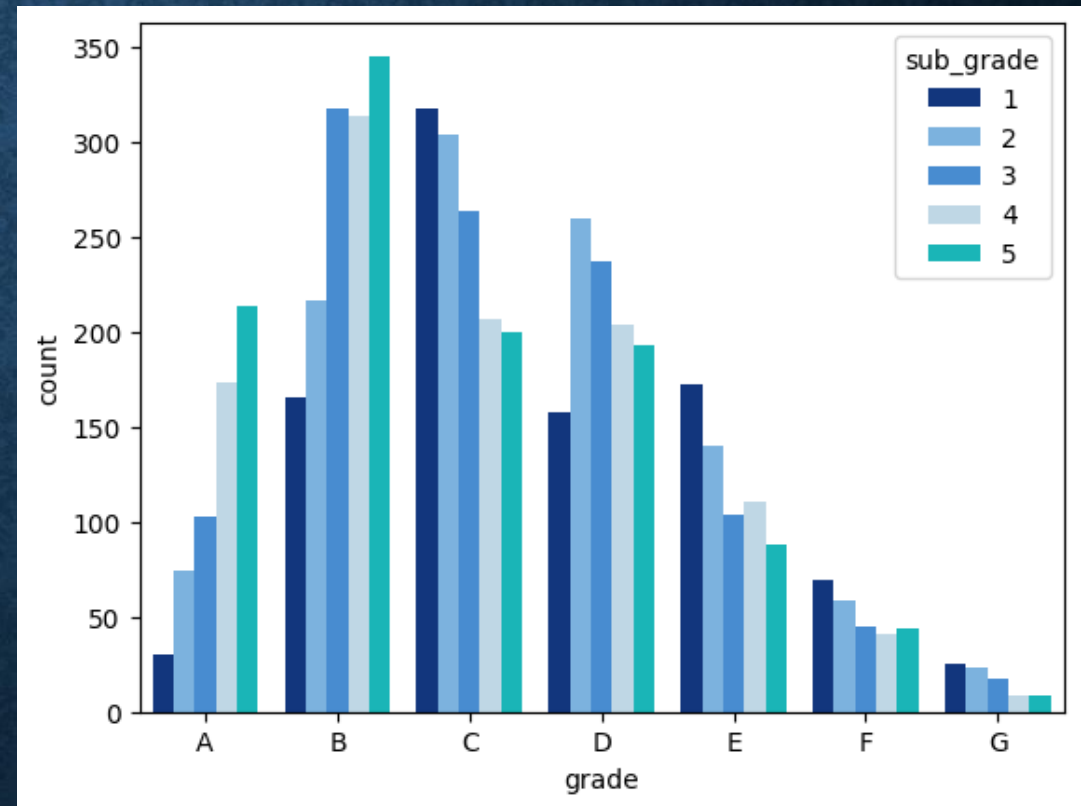
LOAN STATUS AND TERMS COUNT

INTEREST RATE DISTRIBUTIONS

- **Interest Rate:** The count of loan taken varies with interest rate showing peak around in 5-15 bracket and decreasing slowly where as the chance of defaulting increases with interest rate.
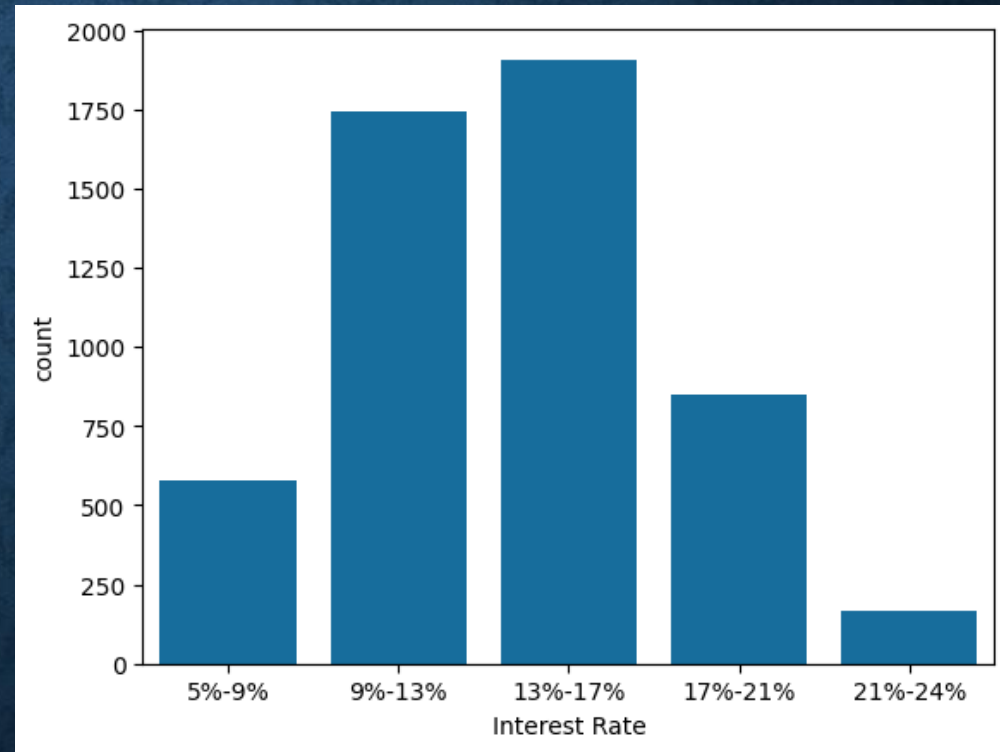

Distribution of Interest Rate

GRADE STATUS

- **Grade:** Due to their low risk and thus low default likelihood, the majority of the granted loans get higher grades. 60 month term loans have larger number of lower grade loans with high risk.

- **Sub Grade:** This gives more information on how the loans within a grade are more heavily weighted toward lower sub grades.
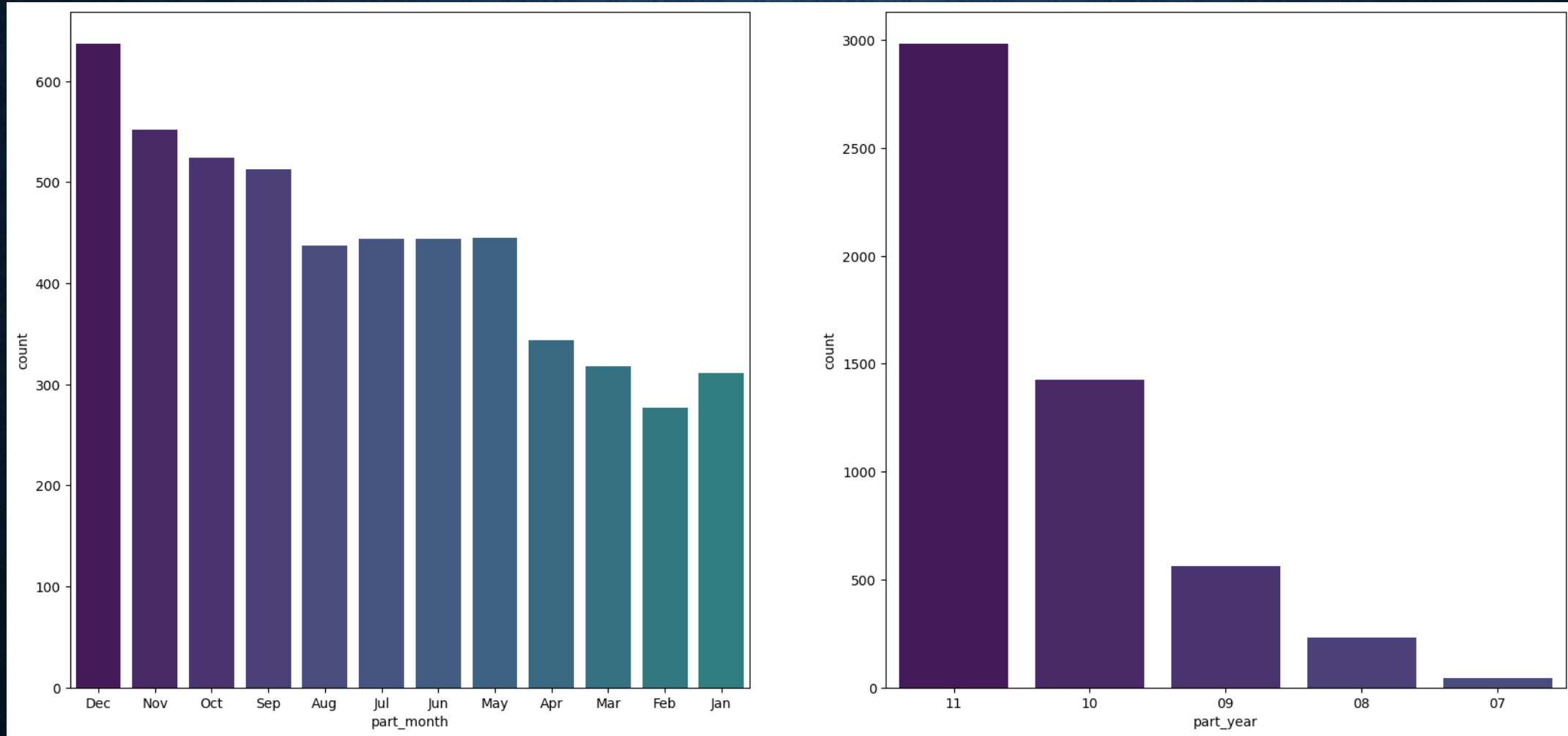
INTEREST RATE SECTION

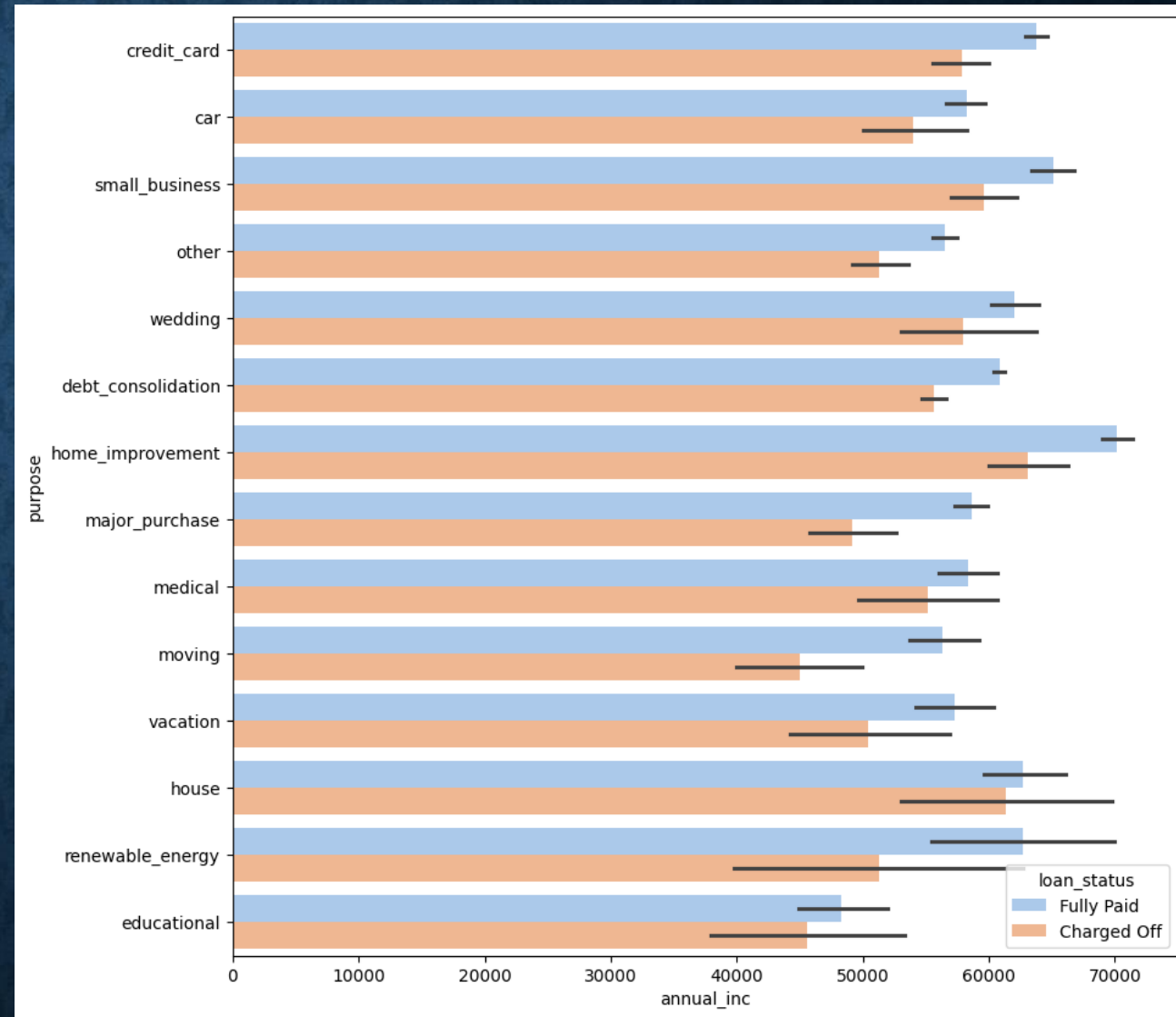- Interest rates are higher between 13% - 17%

LOAN STATUS MONTH AND YEARLY

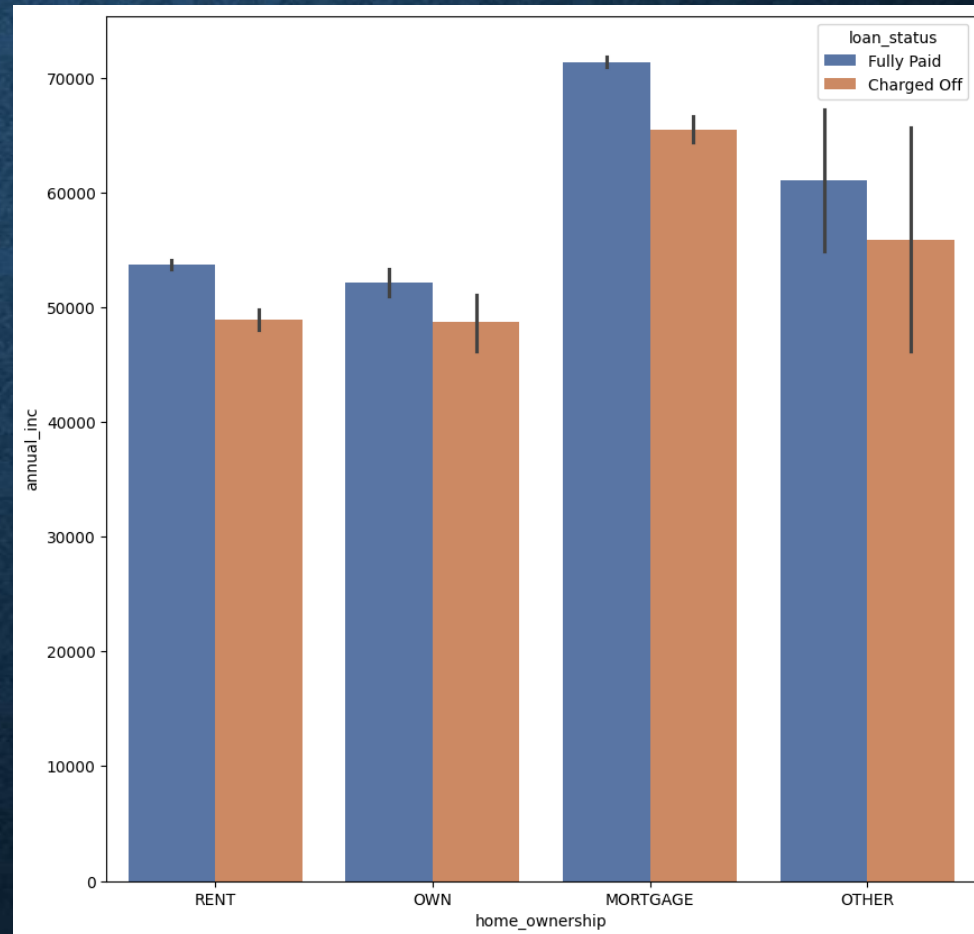- Most loan are paid off in December and year 2011 was most loans paid off

ANNUAL INCOME VS PURPOSE

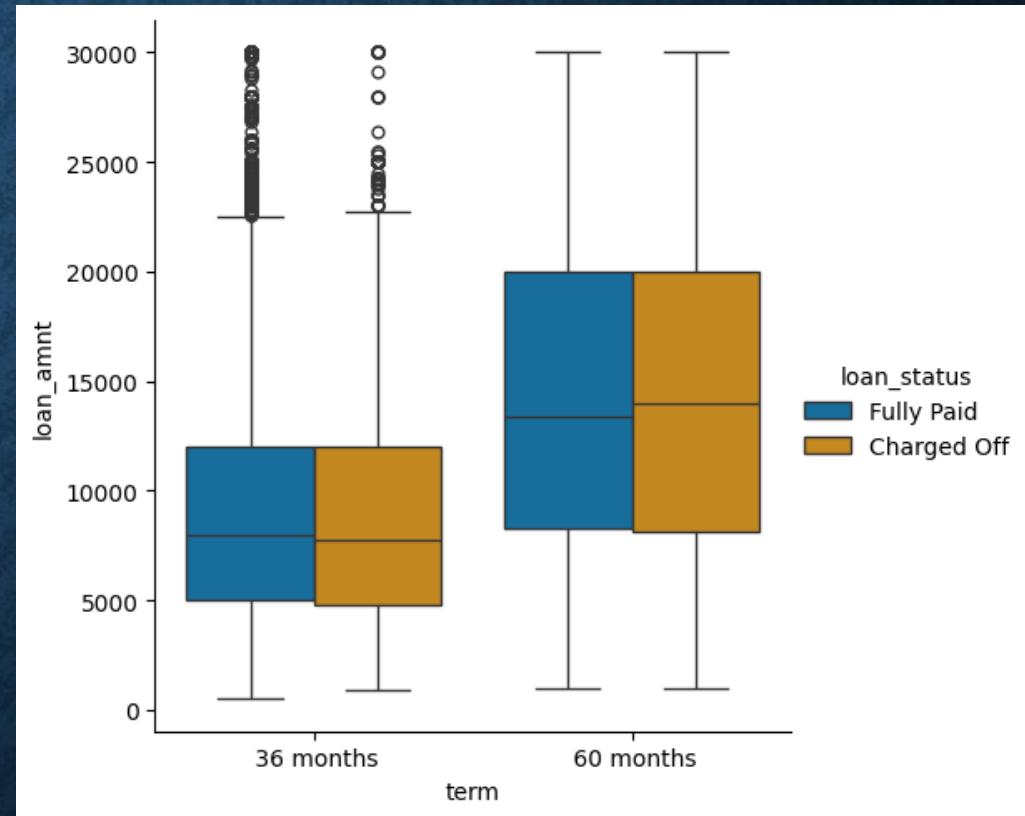- Home improvement has highest annual income and the loan is fully paid off

LOAN STATUS FOR HOME OWNERSHIP

- Mortgage is highest with highest icome

TERMS VS LOAN AMOUNT

- More loan amount with more term

CONCLUSION ANALYSIS

- Highest amount of loan have small business

- 2011 Year was with highest loan amount and with projection seen it will keep increasing yearly

- Charged off and Fully paid loan are same for terms of loan period

- Highest amount of interest rates is for loan amount to 30-35k

- Grade G has highest fully paid loan amount

- Rent has the lowest projection for the loan amount

- Loan amount on house has highest annual income

- Loan for 'home improvement' and have income of 60k -70k