

Upgrad x Shwetabh Shekhar

Lending Club Case Study

shwetabh@shekhar.us

09-02-2022

Understand the loan demographic and driving factors for loan default.

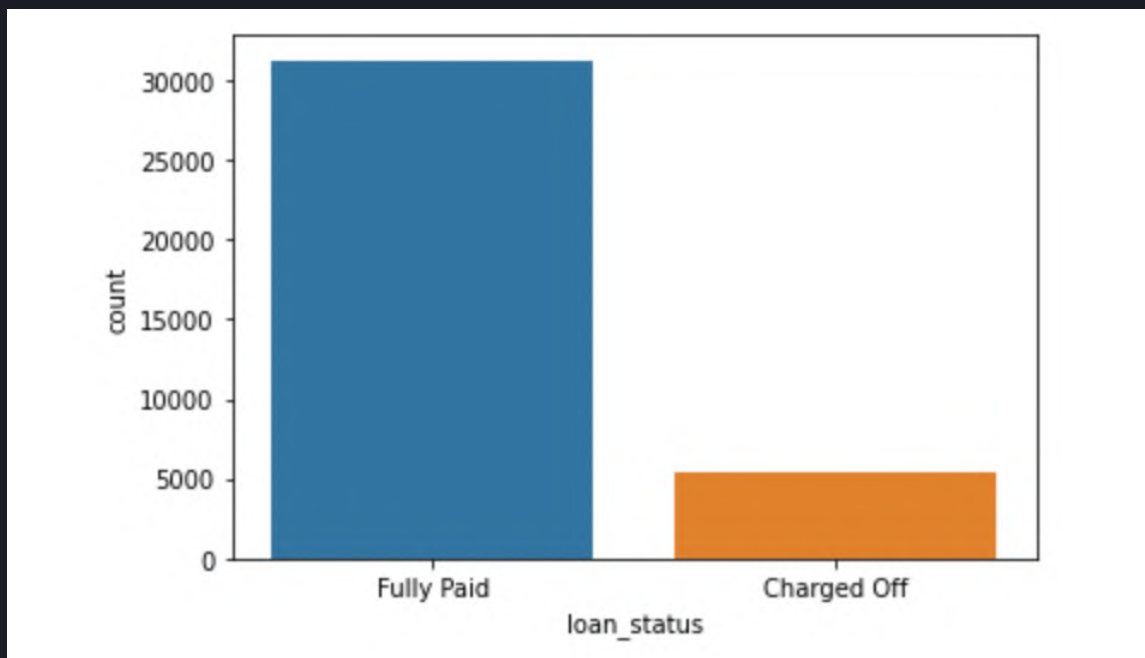
High-level details

- Lending loan to risky applicants leads to financial loss.
- I have analysed what kind of loans are usually taken.
- I have analysed what are the factors that can help us determine which customer is likely to default.
- And I present recommendations to avoid it.

Understanding loan demographic .

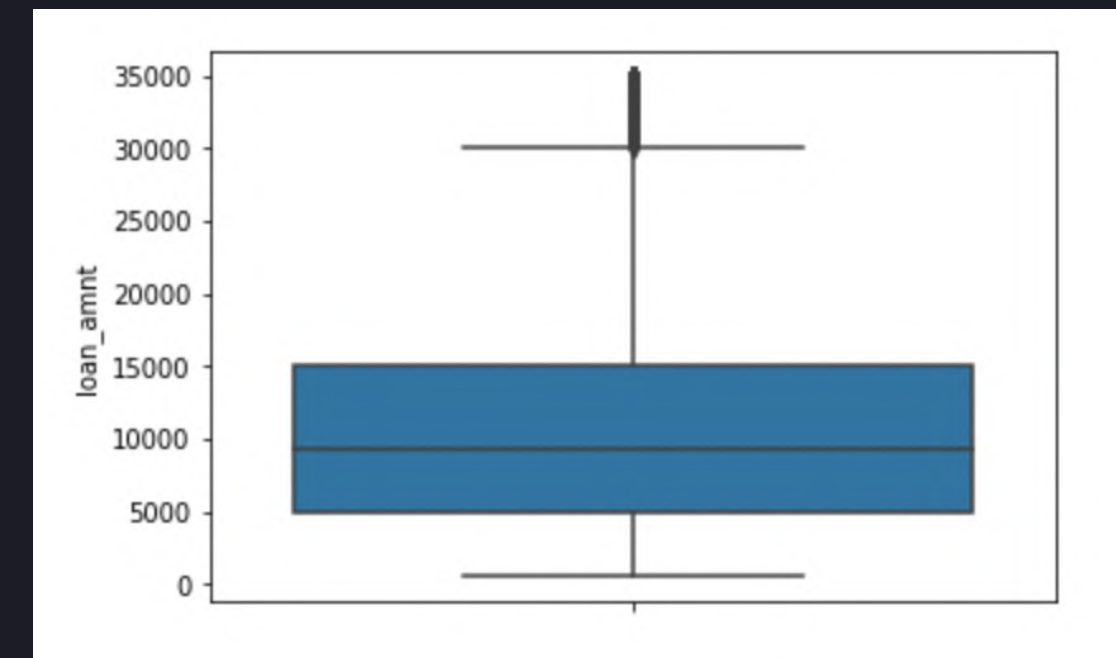
High-level Overview

- The loan amount varies from 0 to 15,000 having a mean of 10,000.
- Debt Consolidation is the most popular category for loans.
- Most of the loans are being taken for less amount around 5000/-.
- People with 10+ years of work experience apply for most of the loans. And people with 0-1 years experience are the second most category of people applying for loans.
- The average interest rate is around 12%. Around 14.78% of the loan have currently defaulted.
- Most people who are taking loans and defaulting are living in rented homes.



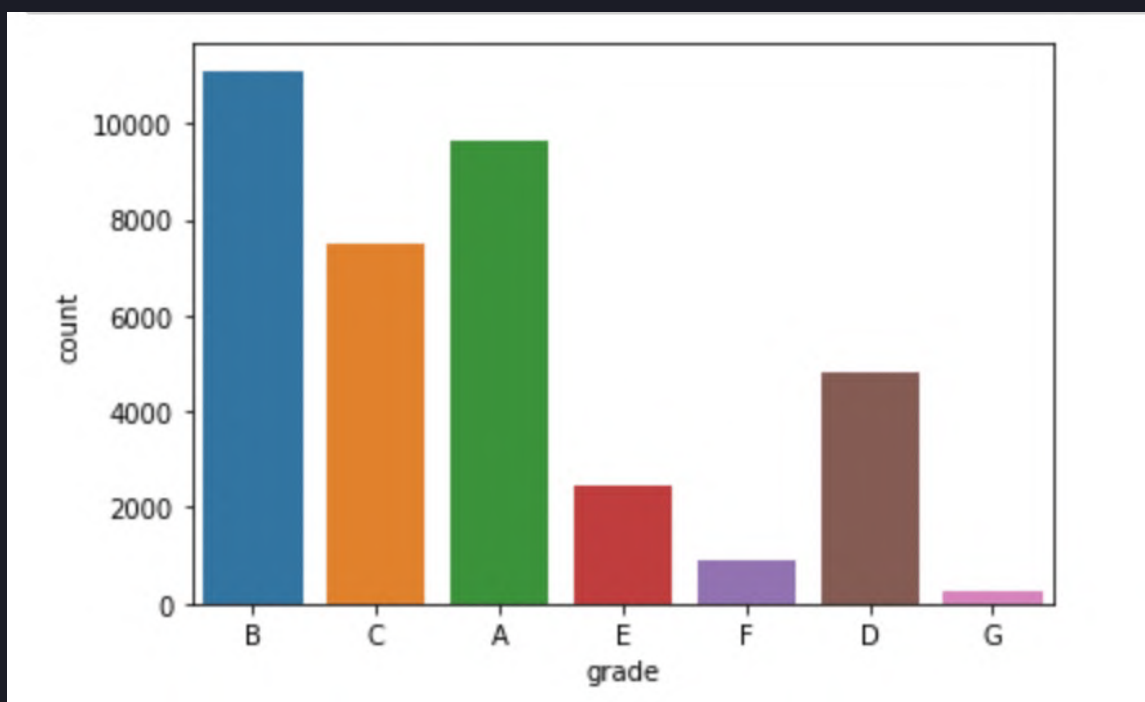
Statistics of Loan being paid and charged off

14.78% loans are currently defaulted.



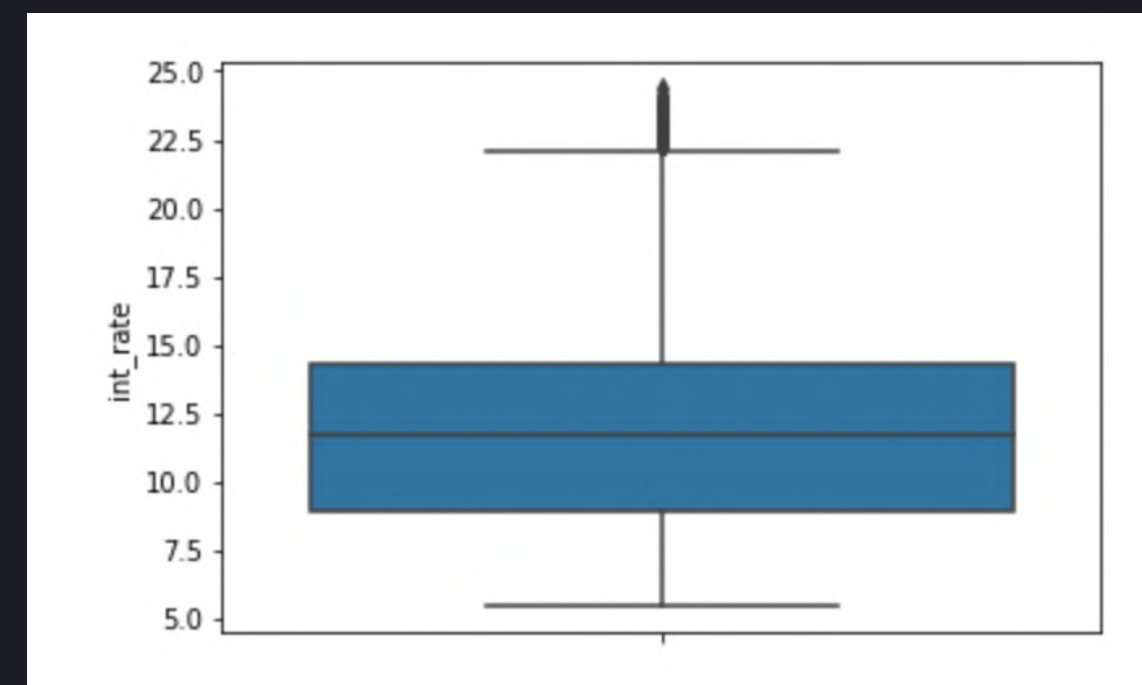
Loan Amount Statistics

The mean loan amount is 10,000/-.



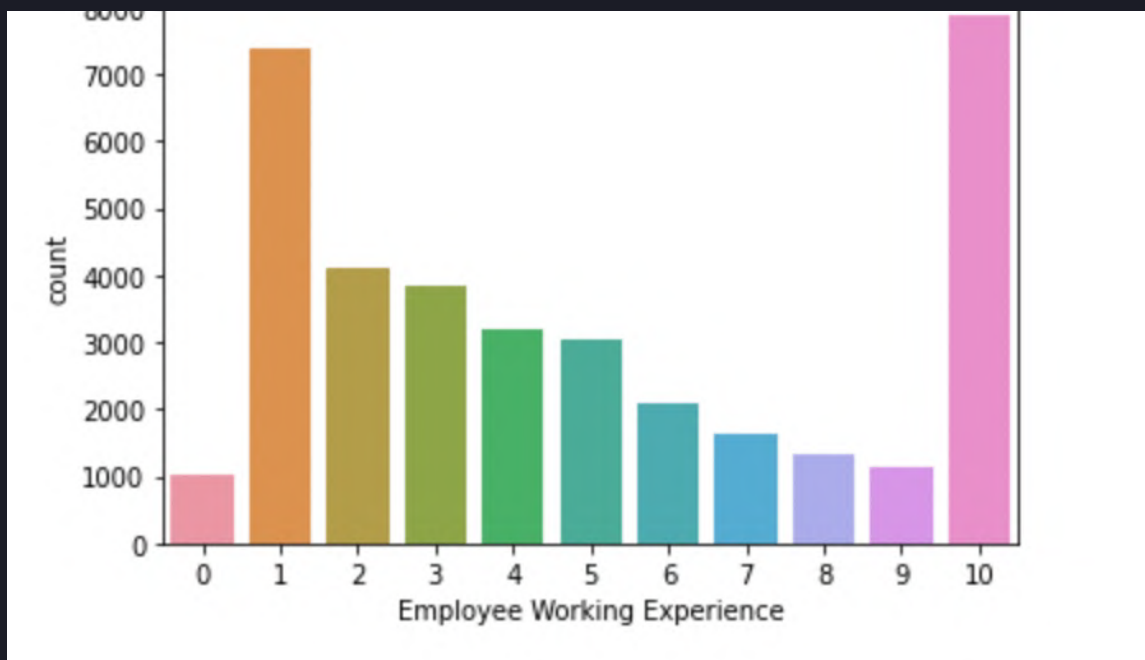
Loan Grade Stats

Most loans availed are low grade loans.



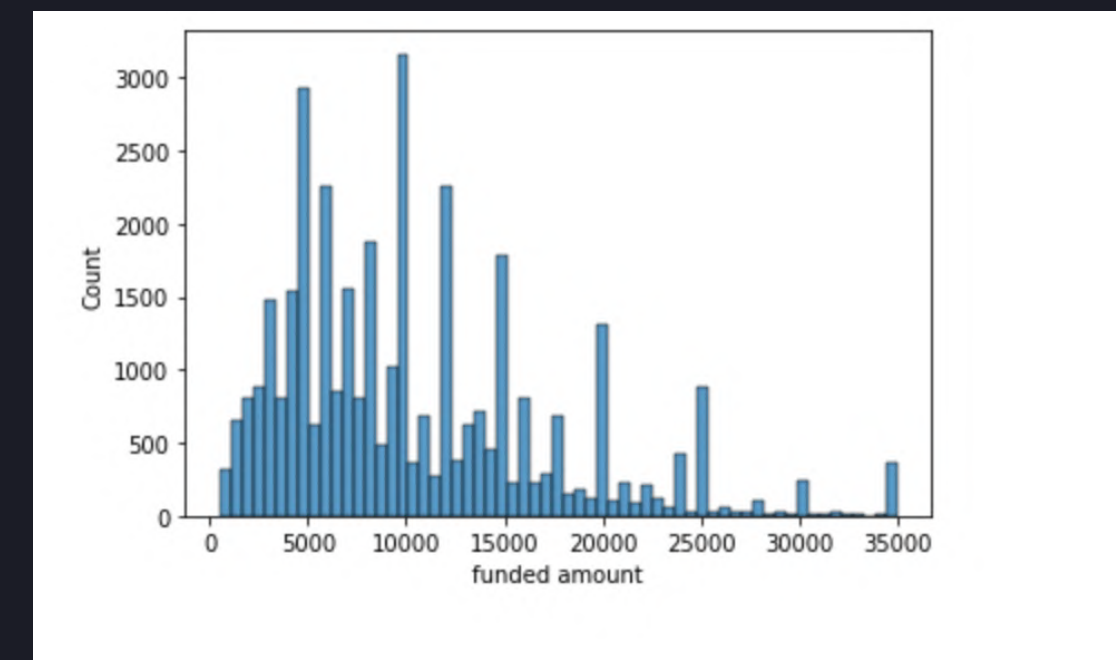
Interest Rate Stats.

Average interest rate is 12%.



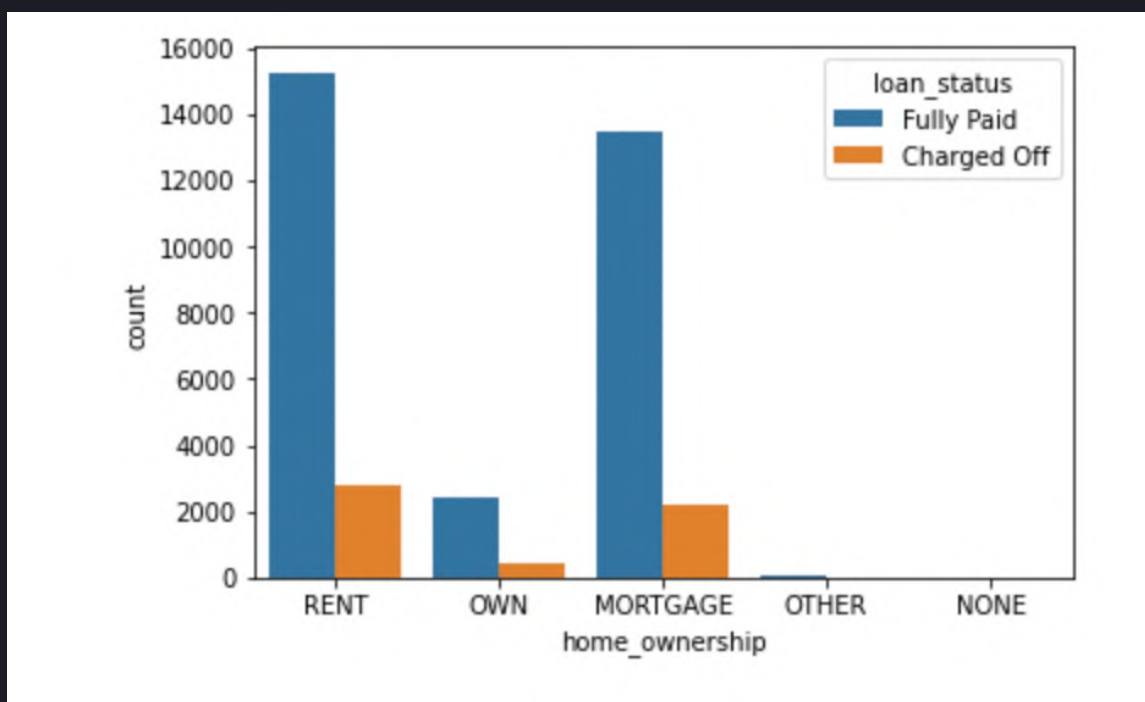
Employee Working Experience

Most loans are availed by 0-1 years and 10+ years experience people.



Loan Amount Statistics

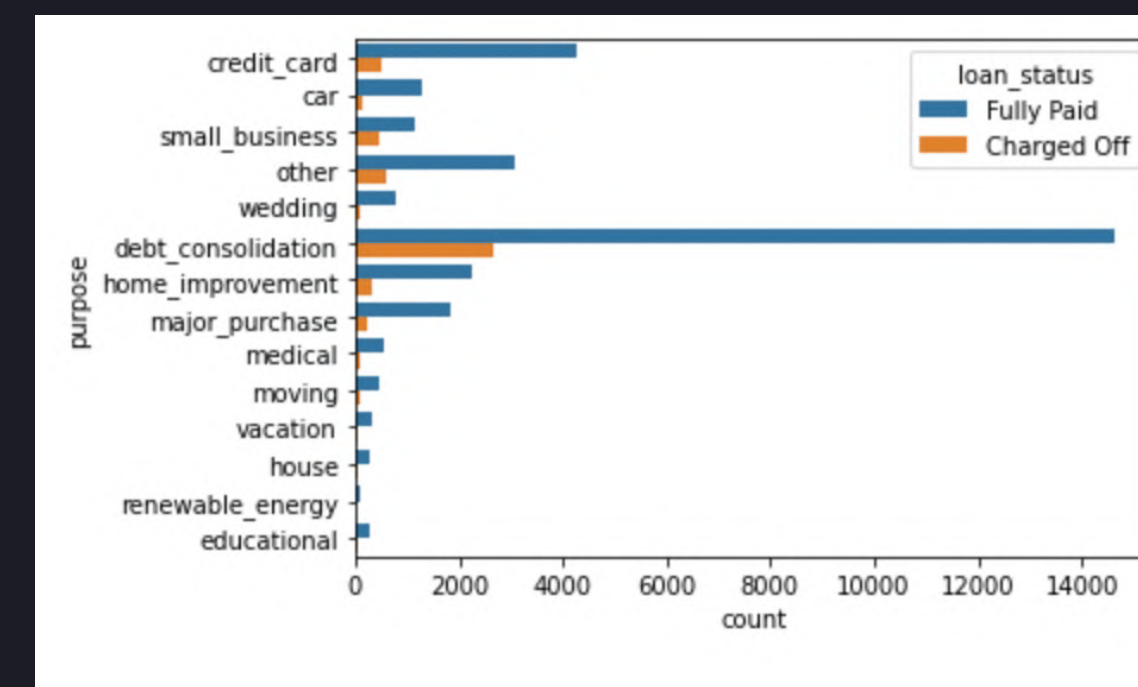
Most Funded loans are less amount loans.



Home Ownership

Most loans are availed by people living in rented home.

Pitch



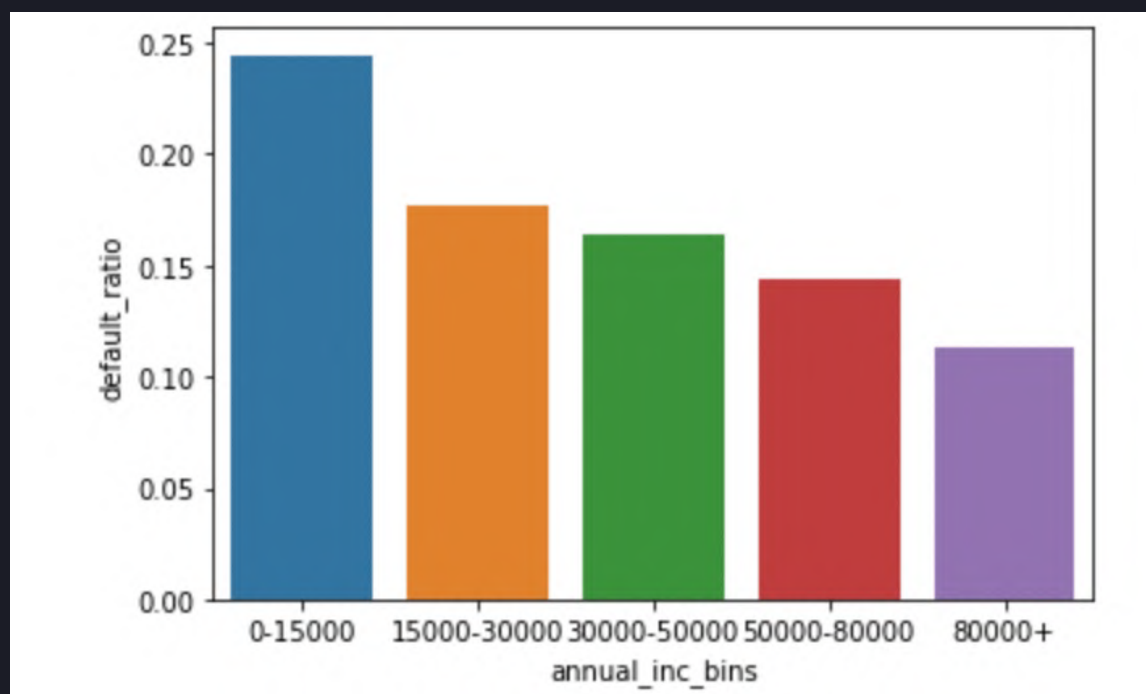
Loan Purpose

Most loans are availed for debt consolidation purpose.

Understanding Loan Default Factors .

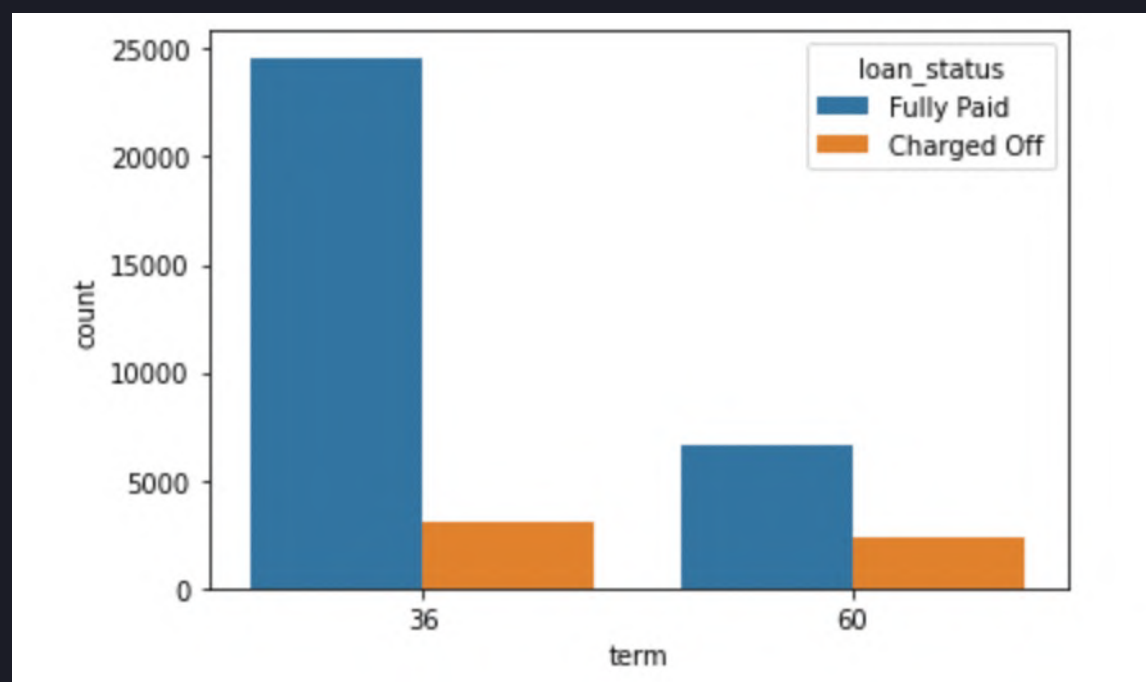
High-level Overview

- High grade loans are likely to be defaulted.
- Loan being granted to the people of California is likely to be defaulted.
- High interest rate loan has a high chance of being defaulted.
- People who have defaulted before have a higher chance of defaulting again.
- Those with 0-1 years of experience have higher chances of defaulting loan.
- Person availing loan for Small Business has a high chance of defaulting it.
- People taking loans in the income range of 10,000-15,000 have a high chance of defaulting the loan.
- Those who take 60 months to repay the loan have a higher chance of defaulting the loan.



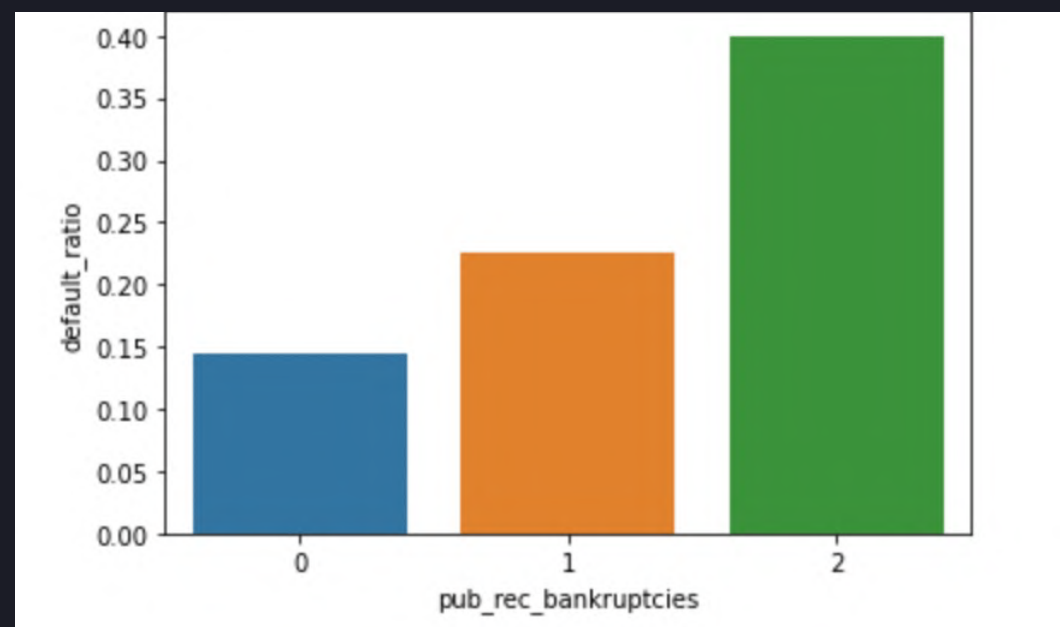
Annual Income vs Default Ratio

People with lower annual income especially in the range of 0-15000 will default.



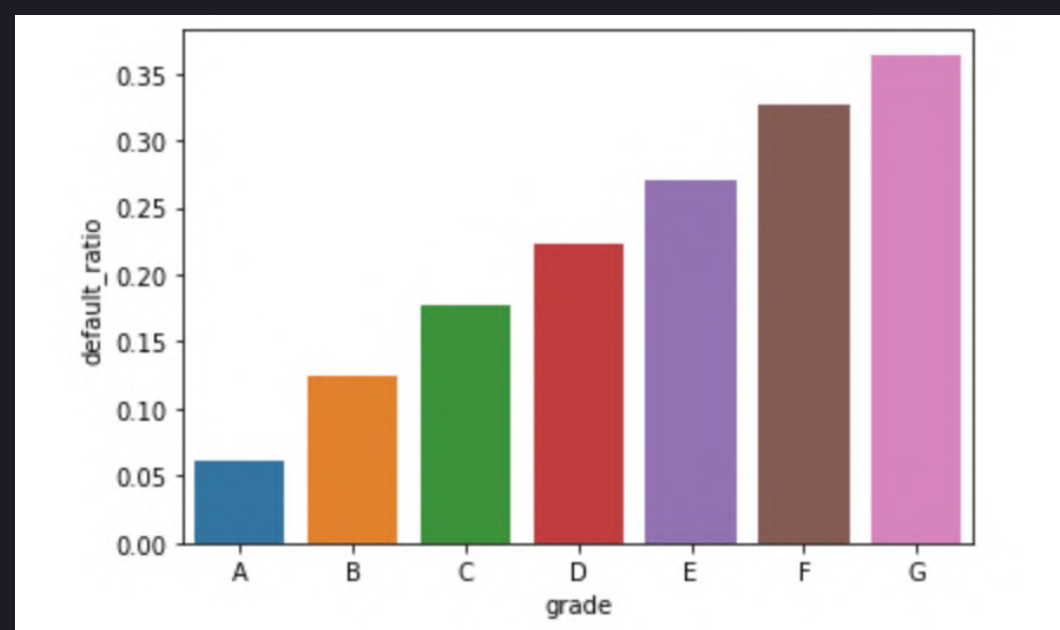
Loan Term vs Kind of Loan

Those who take 60 months to repay the loan have a higher chance of defaulting the loan.



Those who have defaulted before are likely to default again.

Public Bankruptcy vs Default Ratio

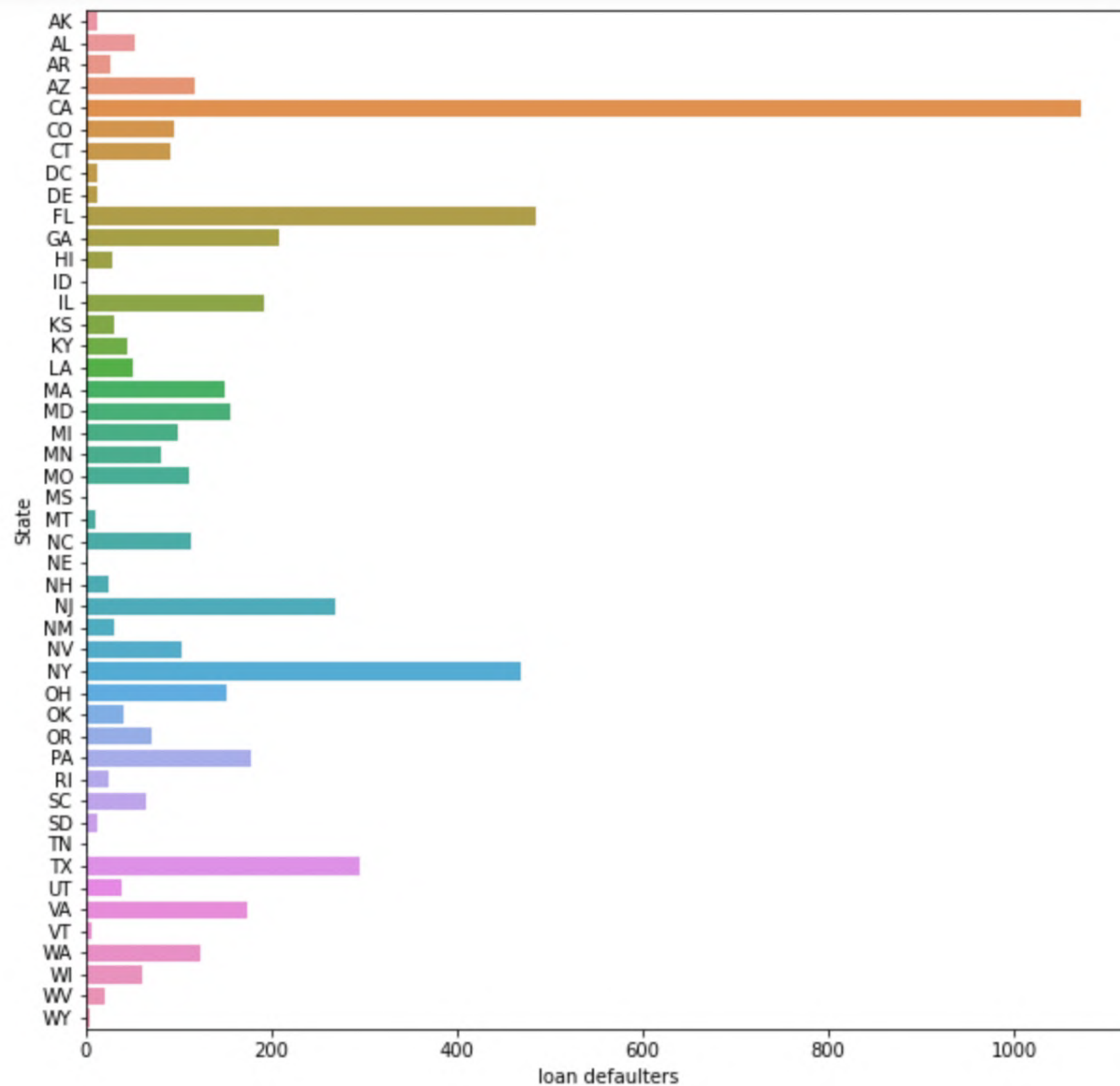


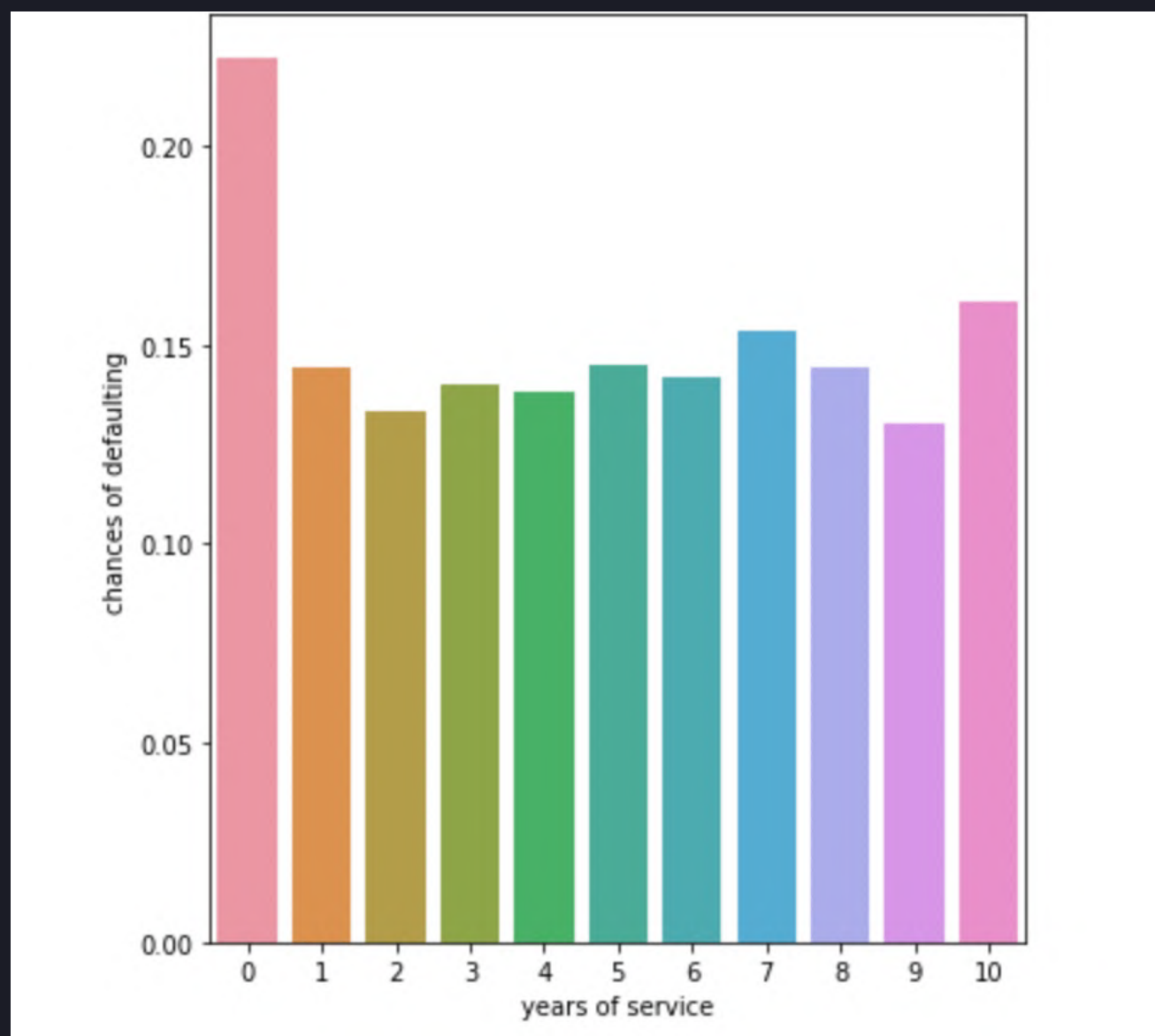
A higher grade loan is likely to be defaulted. Infact higher the loan. Higher is the chance of it being defaulted.

Grade vs Default Ratio

State vs Loan Default Count

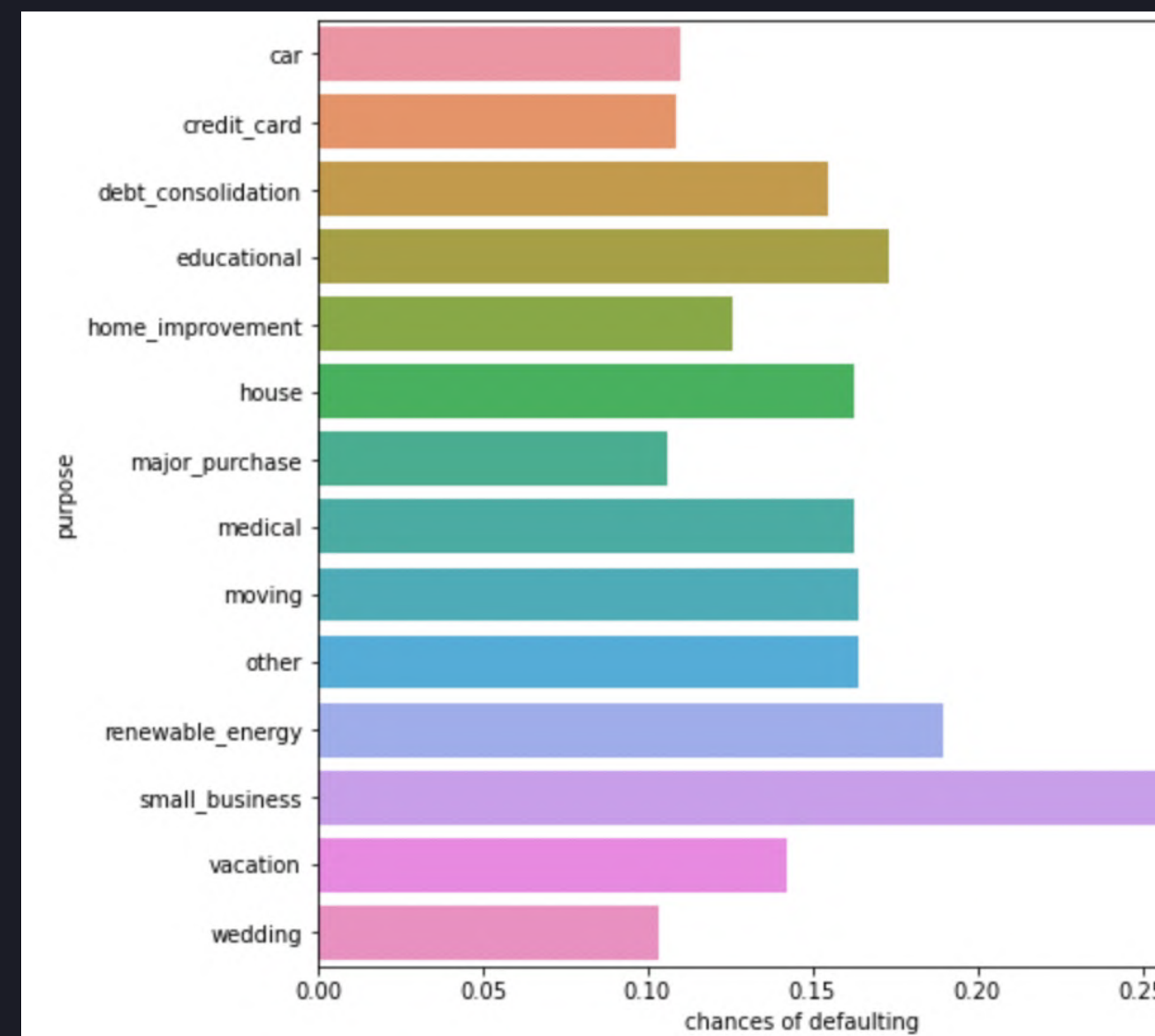
People belonging to the state of California are likely to default.





Years of Service vs Default Ratio

Loans taken by 0-1 year experience folks are likely to be defaulted.



Default Ratio vs Purpose of Loan

Loans taken for small business are likely to be defaulted.

Recommendations.

High-level Overview

- Avoid giving high-grade loans to people who are likely to default such as those belonging to California or having public bankruptcy records.
- Avoid giving high-interest rate loans especially above 15%.
- Do not give loans to people who have defaulted before.
- Give fewer loans to people who are not working or have been working for only a year.
- Avoid giving high-grade loans with a high rate of interest to people availing loans for small businesses.
- Avoid giving loans to people in the income range of 10,000-15,000, especially if they fulfil any of the above criteria.
- Give fewer high term loans.