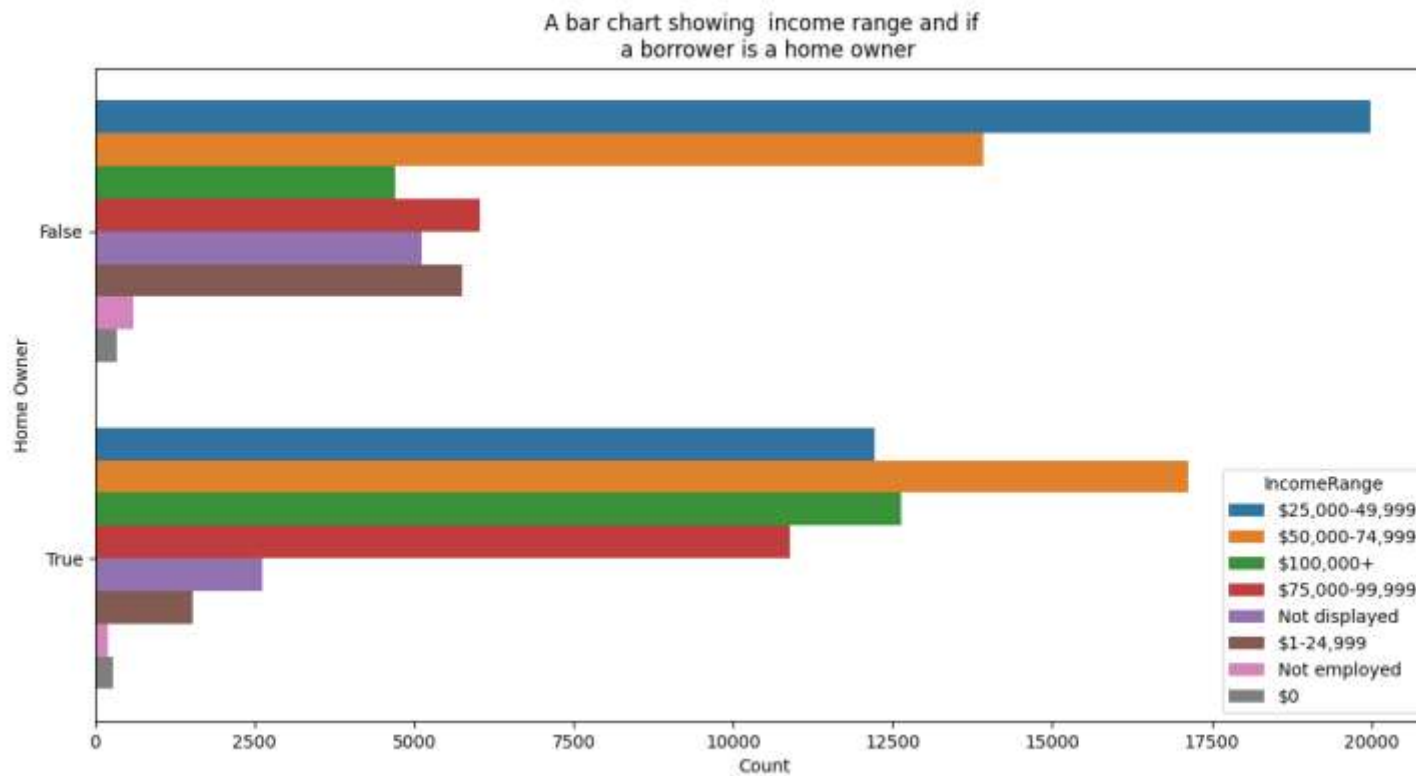**NAME: IBRAHIM AYODOTUN**

Prosper Loan Dataset

Explanatory stage

1. Relationship income range and homeowner

From the bar chart below most homeowners are the high earners, people earning above $50,000.

A bar chart showing income range and if a borrower is a home owner

2. Employment status and homeowners

Most of the employed customers are homeowners

A bar chart showing a borrowers employment status and home owner
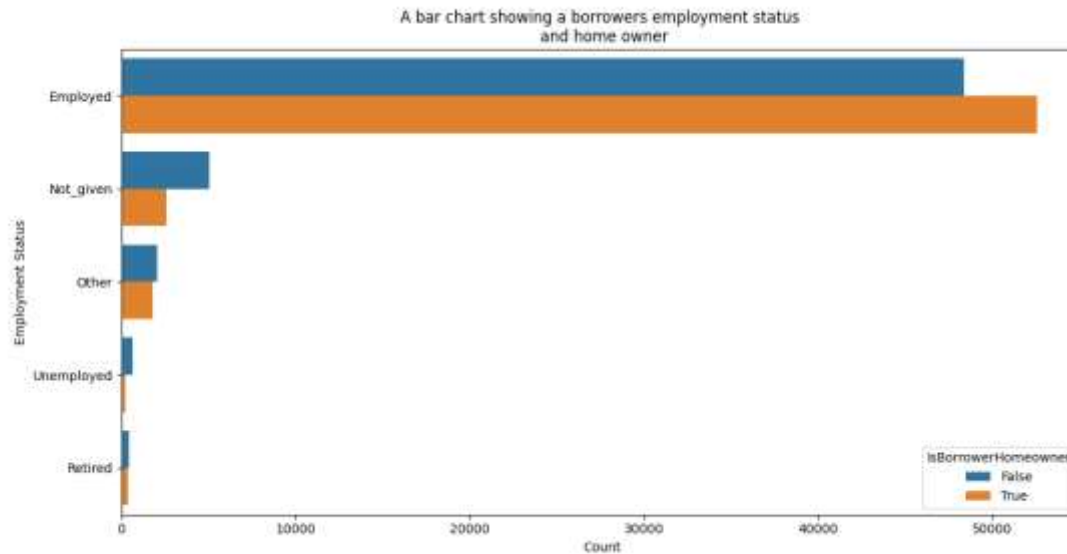
3. Relationship showing APR and borrowers rate through the years

The line plot below shows the relationship between the annual percentage rate and borrowers rate over the years. There was a steady increase in the from 2007 to 2011then there was a drop. The reason for the increase and decrease might be changes in bank policy.

A line plot showing borrower's rate over time

A line plot showing borrower's Annual percentage rate over time
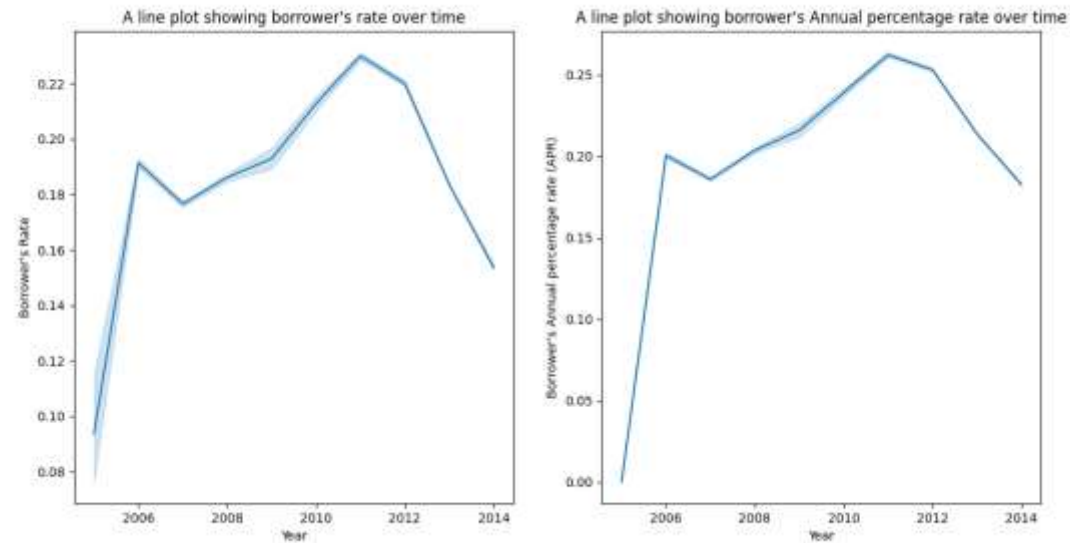
4. Relationship between credit score and borrower's APR

The scatter plot shows the relationship between average credit score and borrower's. The higher the credit score the lower the annual percentage rate and interest rate of the loan.

A Scatter plot for showing Borrower's APR and average_credit_score

A Scatter plot for showing Borrower's Rate and average_credit_score
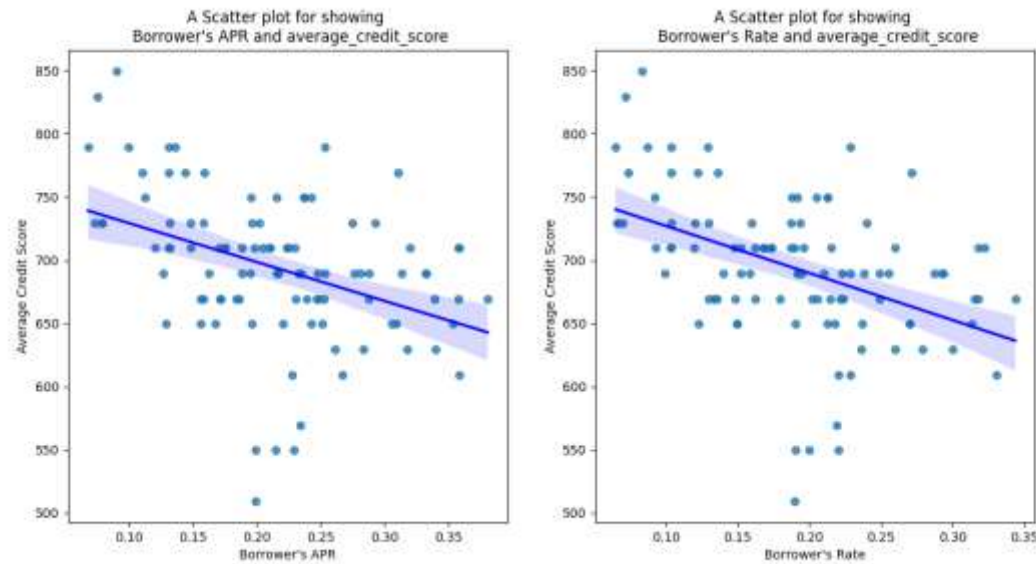
Conclusion

- Homeowners is a factor which determine the interest rate of loans
- Employment status is also a factor for interest rate, unemployed persons had a higher interest rate
- Most loans are collected to settle debts
- Borrower's rate and APR changes over the years.