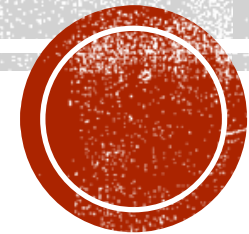


# LENDING CLUB CASE STUDY

Ekansh jain



# PROBLEM STATEMENT

- ❑ For any consumer finance company, it is important to identify the borrowers who do not tend to repay the loans in order to avoid the financial losses for the company.
- ❑ The aim of this analysis project is to understand the factors and patterns which tend the borrowers to default a loan on the basis of their past loan behaviors.
- ❑ The available data corresponds to the complete loan details for all the past applicants including whether they defaulted or not.

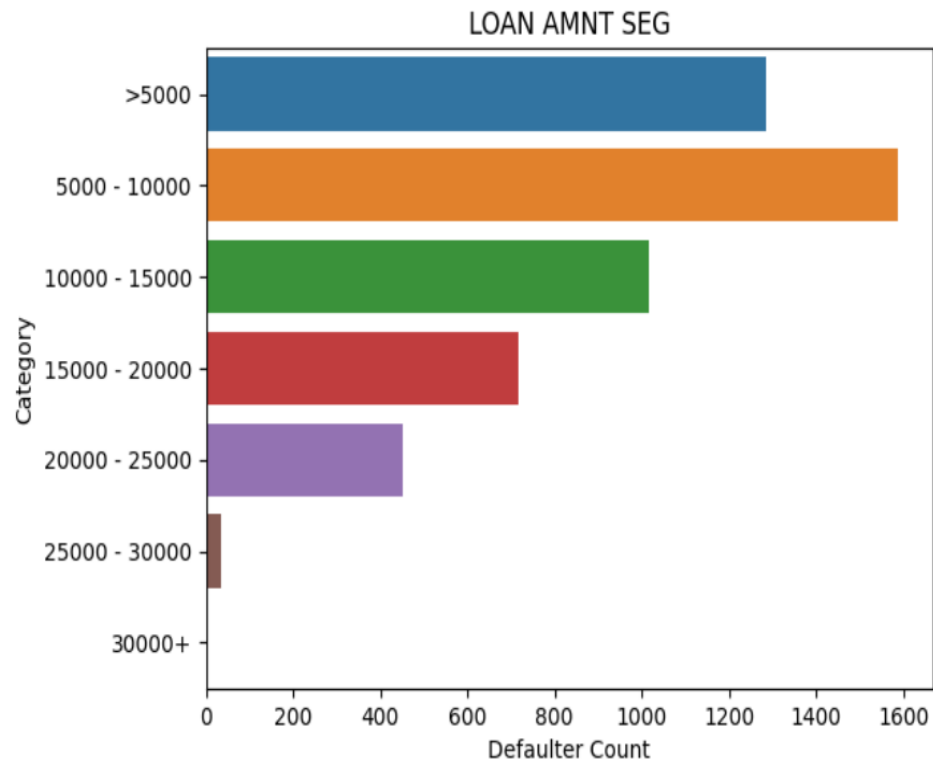


# ANALYSIS APPROACH

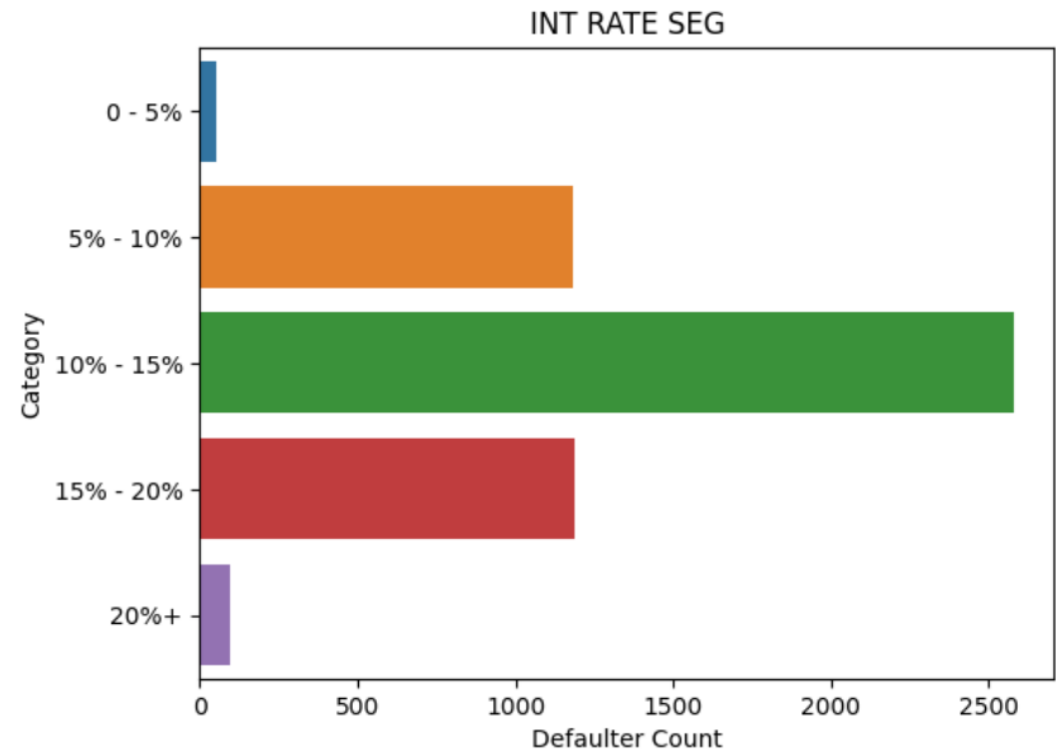
- The data analysis was carried out with the following steps:
  1. Data Understanding
  2. Data Cleaning
  3. Univariate Analysis – Observations drawn for individual parameters (or variables) on loan behavior
  4. Bivariate Analysis – Observations drawn for multiple parameters combined impact on loan behavior



# UNIVARIATE ANALYSIS

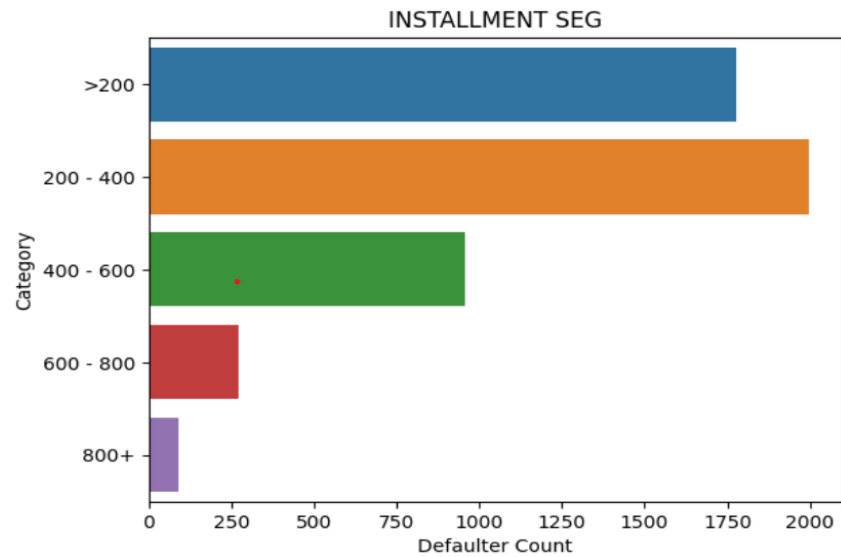


Employees borrowing loan for amount between 5000 – 10000 tend to default the loan

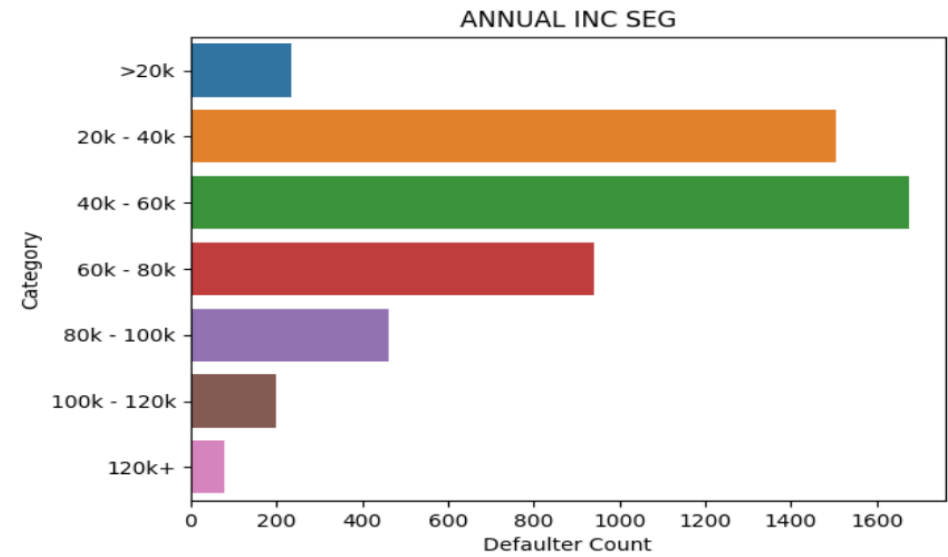


Employees borrowing loan with interest rates in range 10 to 15% tend to default the loan

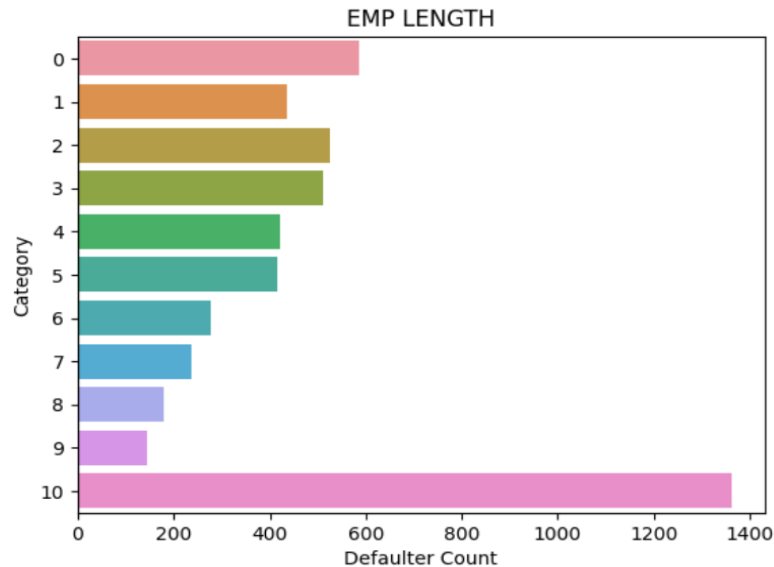




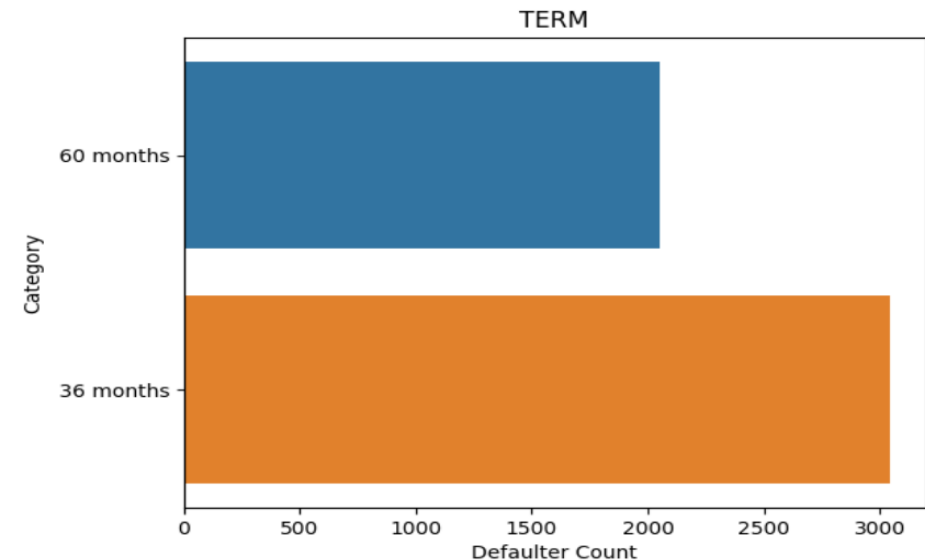
Loans borrowed with installments between 200 – 400 have more chances of being defaulted



Employees taking loan with annual incomes ranging 40k – 60k have more chances of defaulting the loan

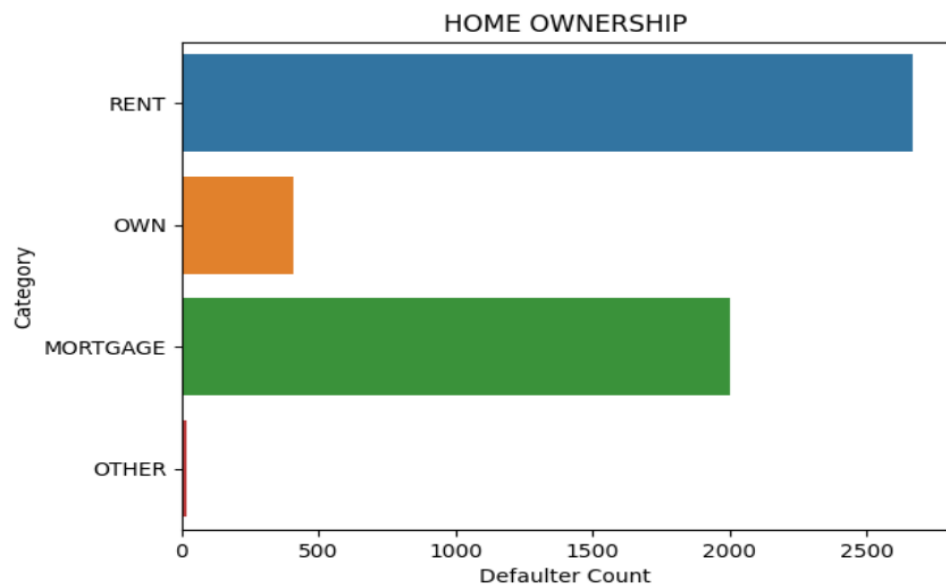


Employees taking loan who have worked for 10 or more years have more chances of defaulting the loan

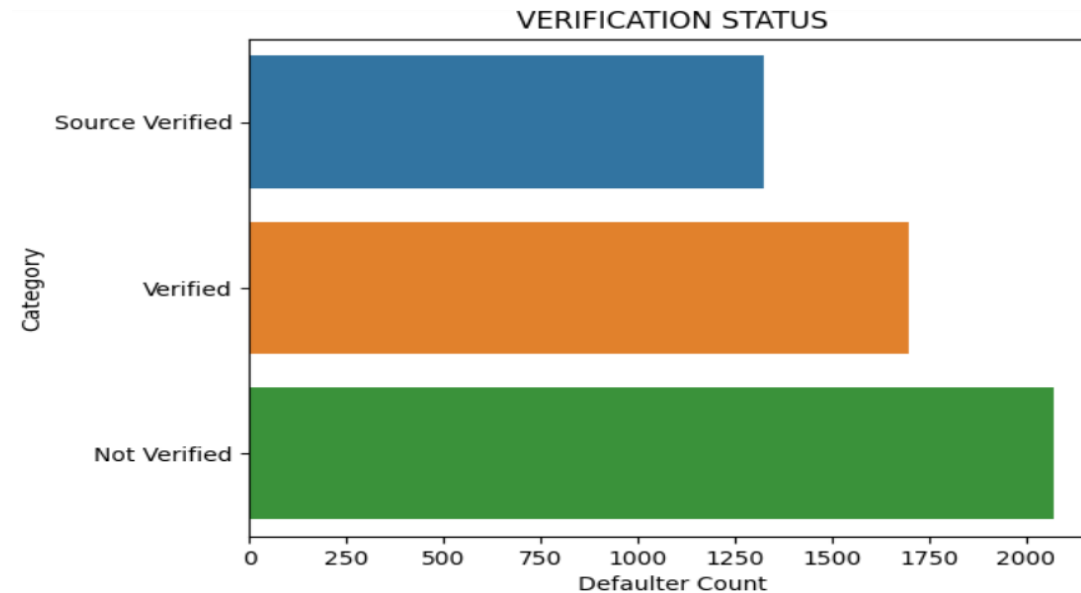


Loans borrowed for short term i.e. 36 months have more chances of being defaulted

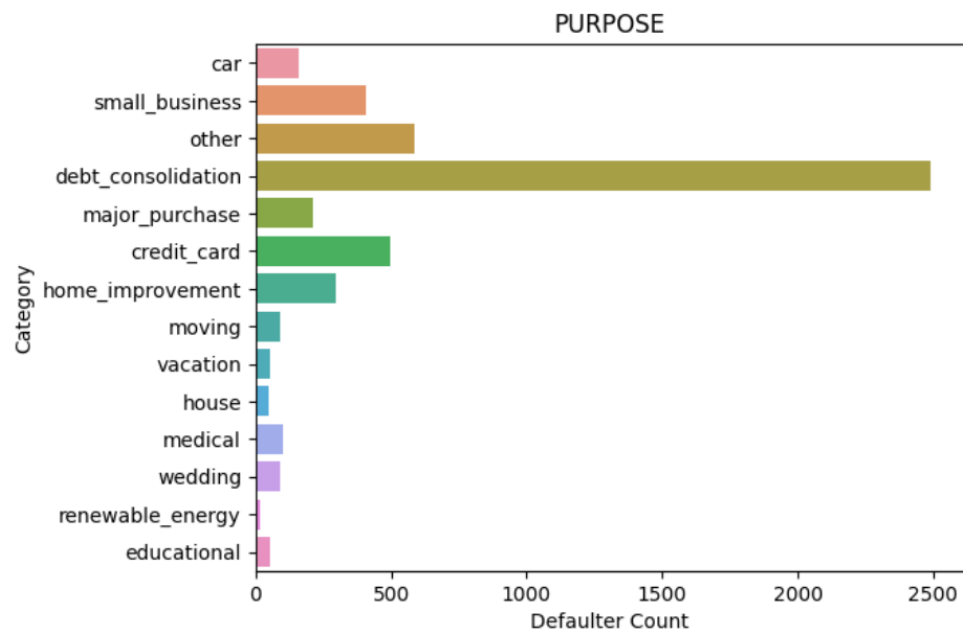




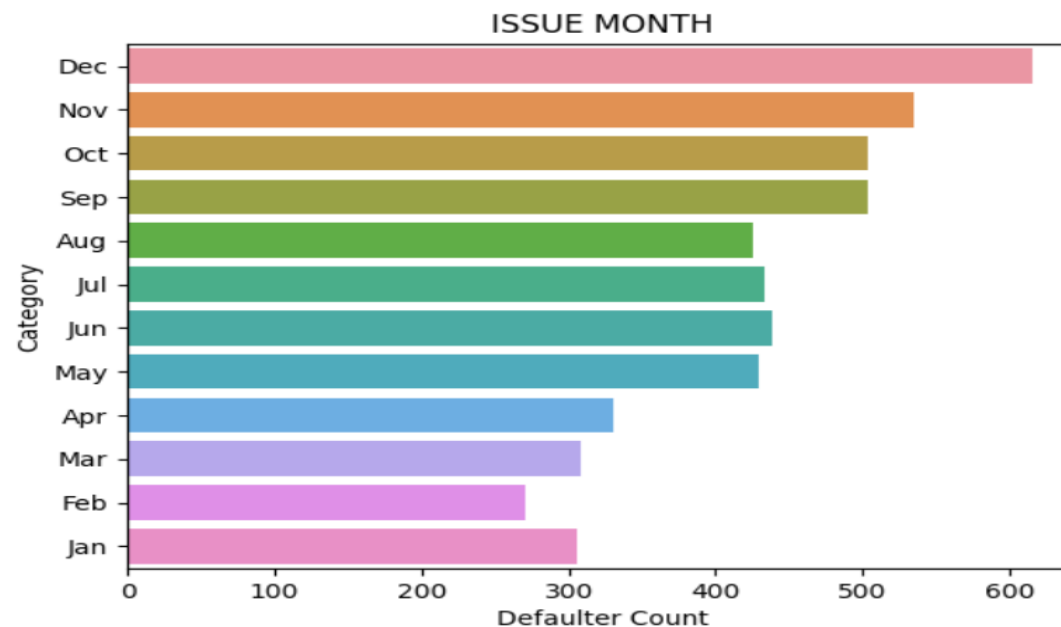
Employees with rented homes tend more to default the loan



Employees who don't have verified status tend more to default the loan



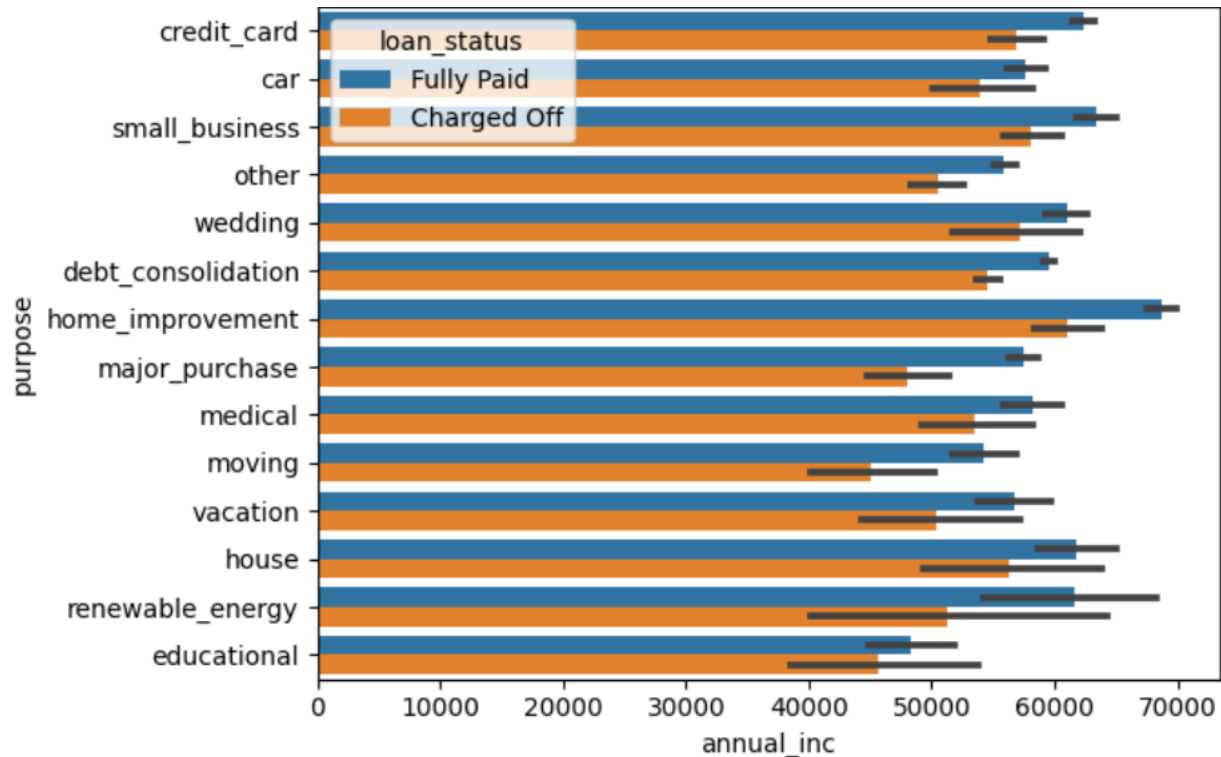
Employees who take loans for debt consolidation tend more to default



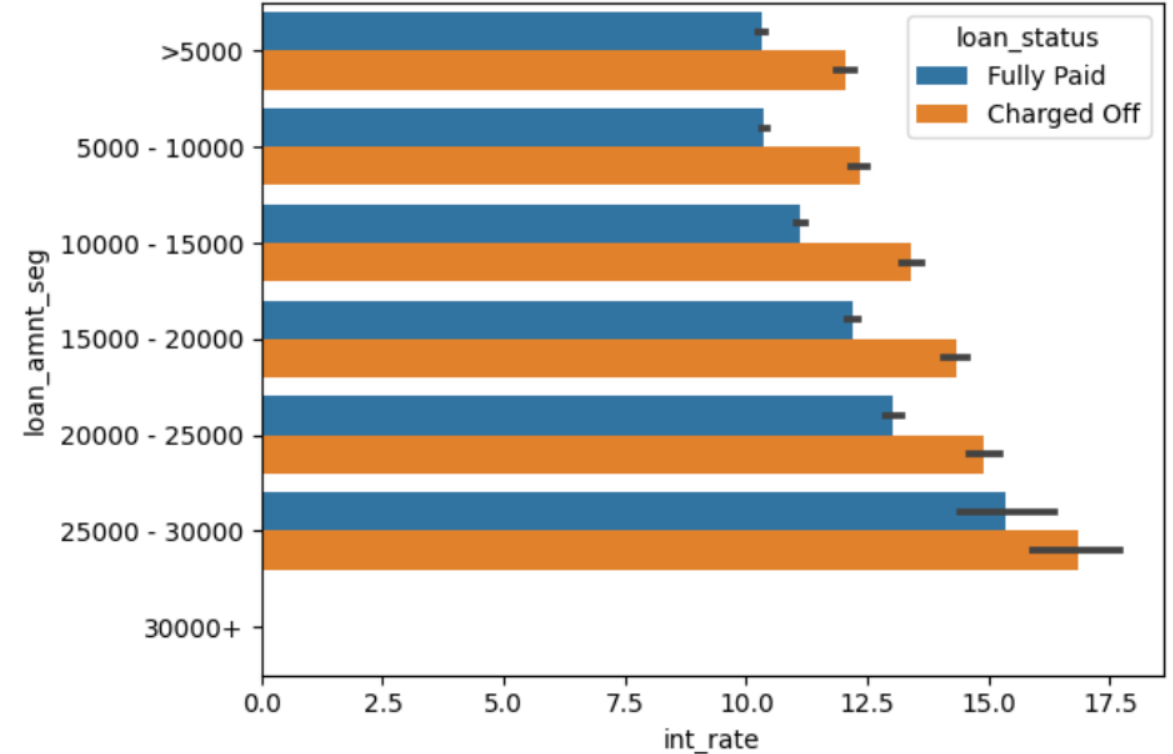
Employees taking loans in Dec tend more to default the loan



# BIVARIATE ANALYSIS

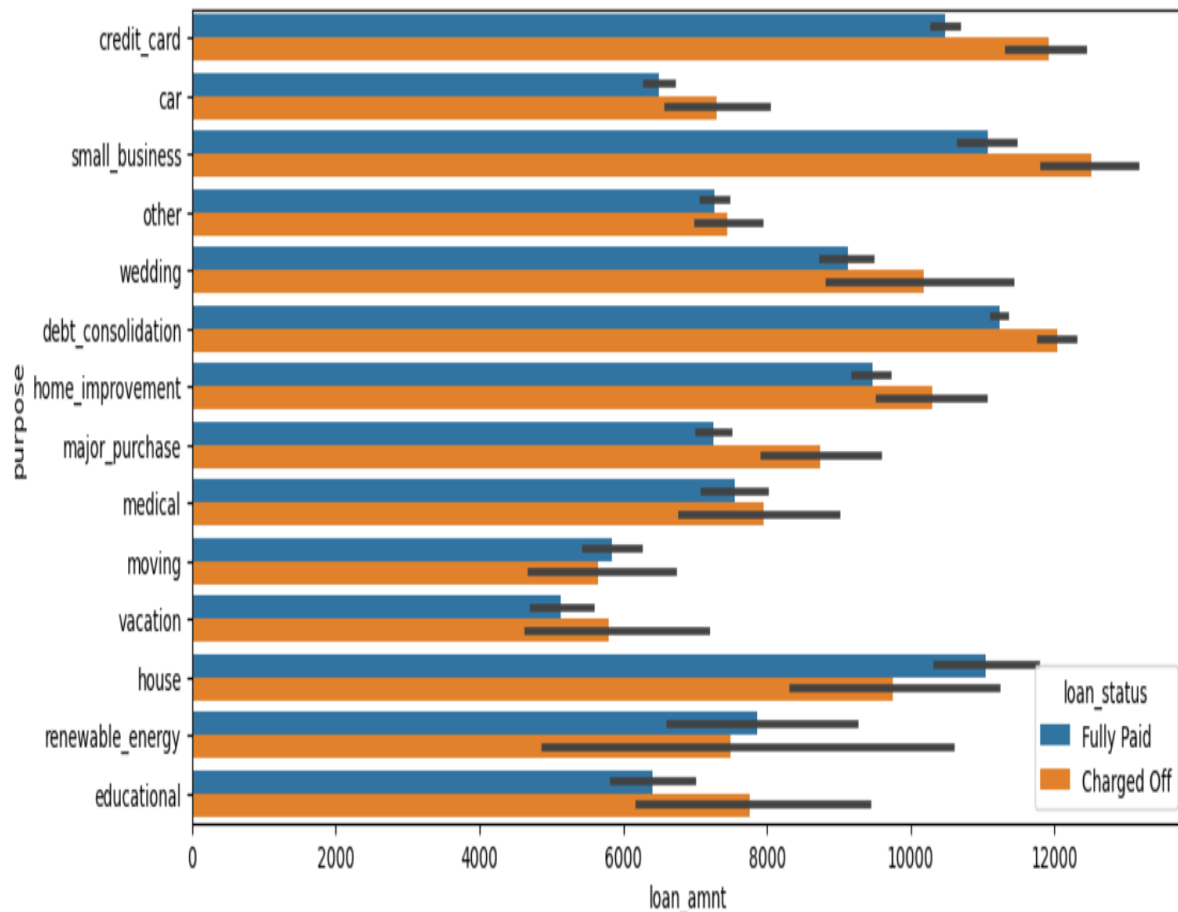


Employees who have high annual income ranging 60000 to 70000 taking loan for home improvement are more probable to default the loan

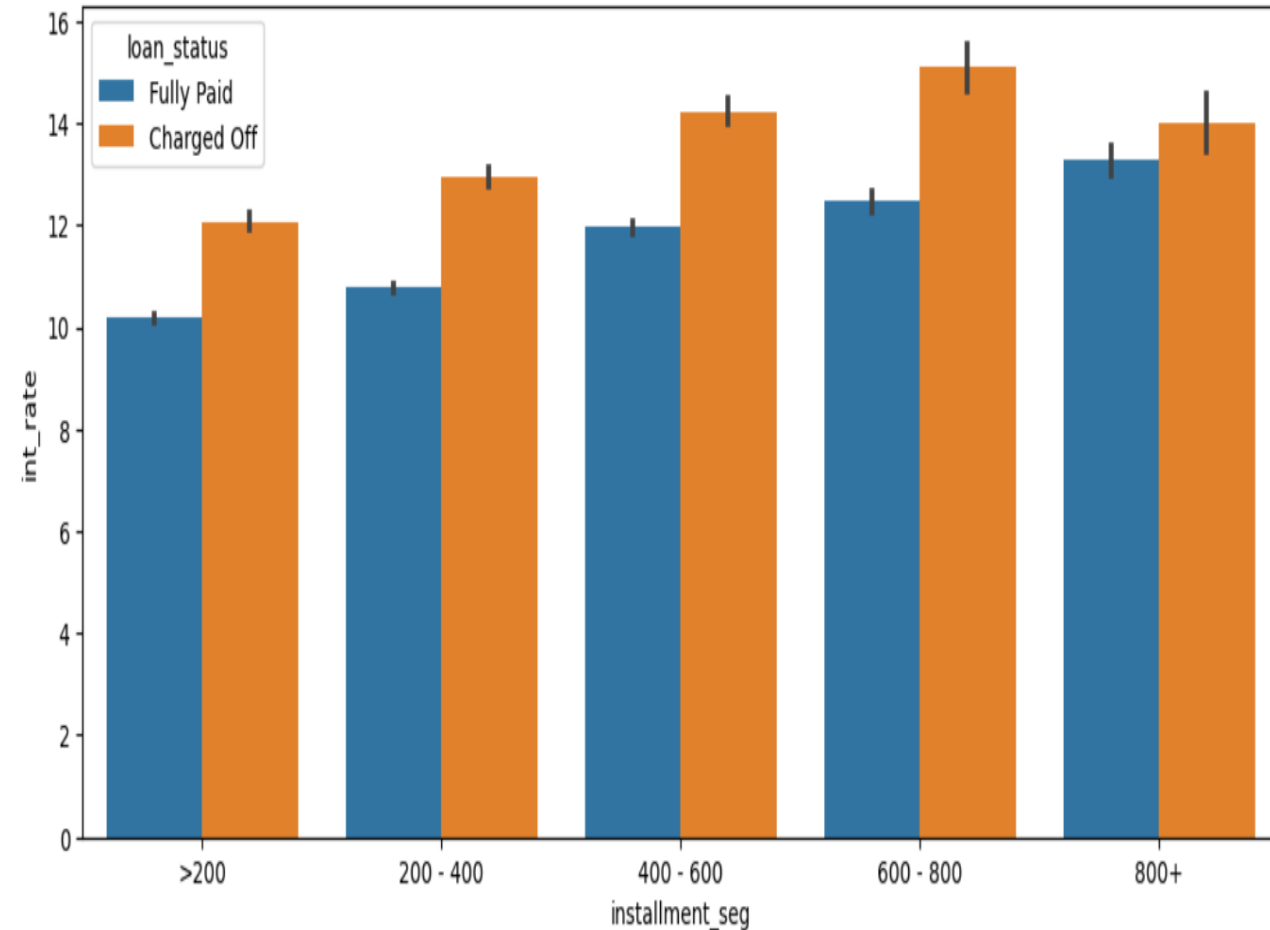


Employees require loan with amount ranging 25000 to 30000 with high interest rates between 15% to 17.5% are more probable to default the loan





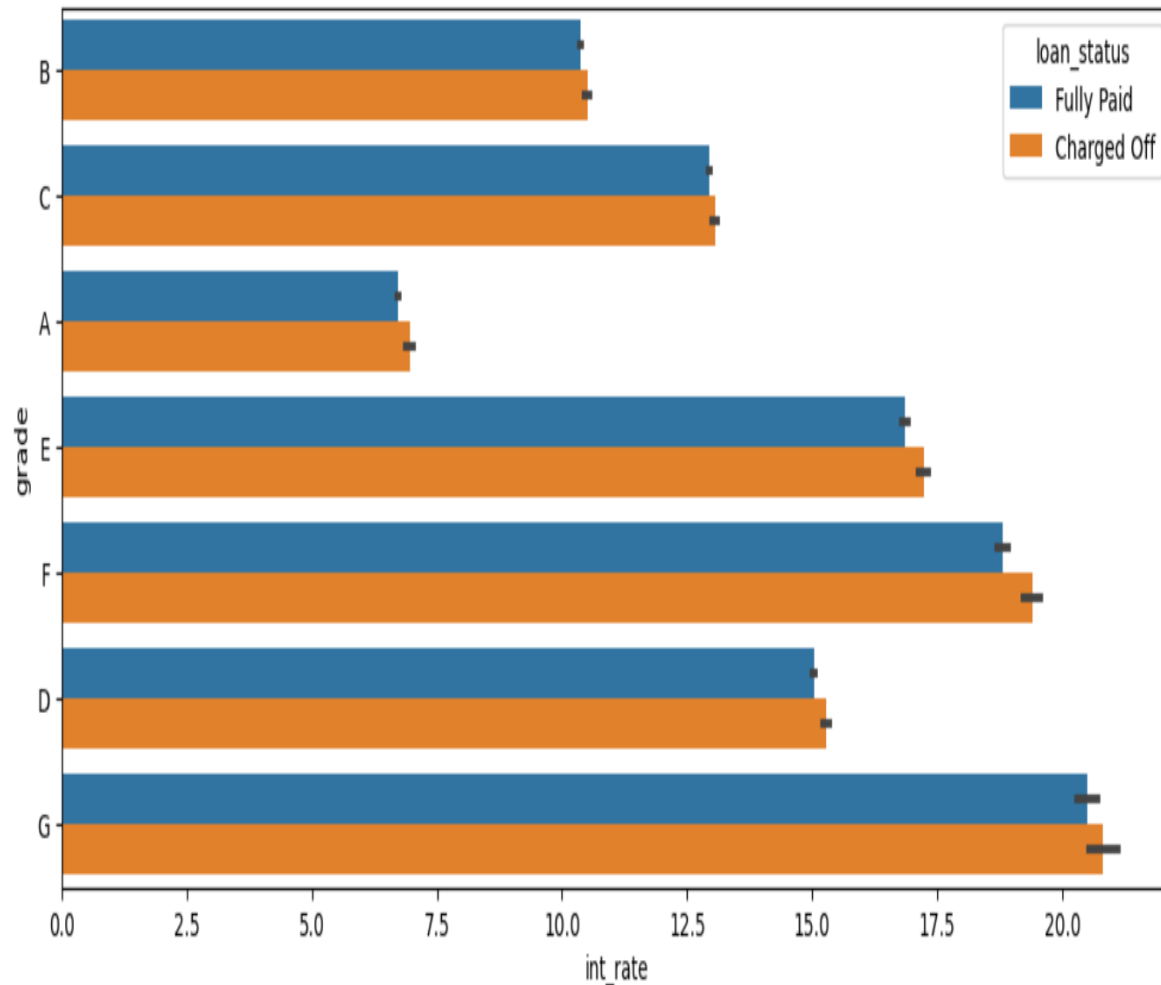
Employees who require high loan amount (12k+) for small businesses are more probable to default the loan



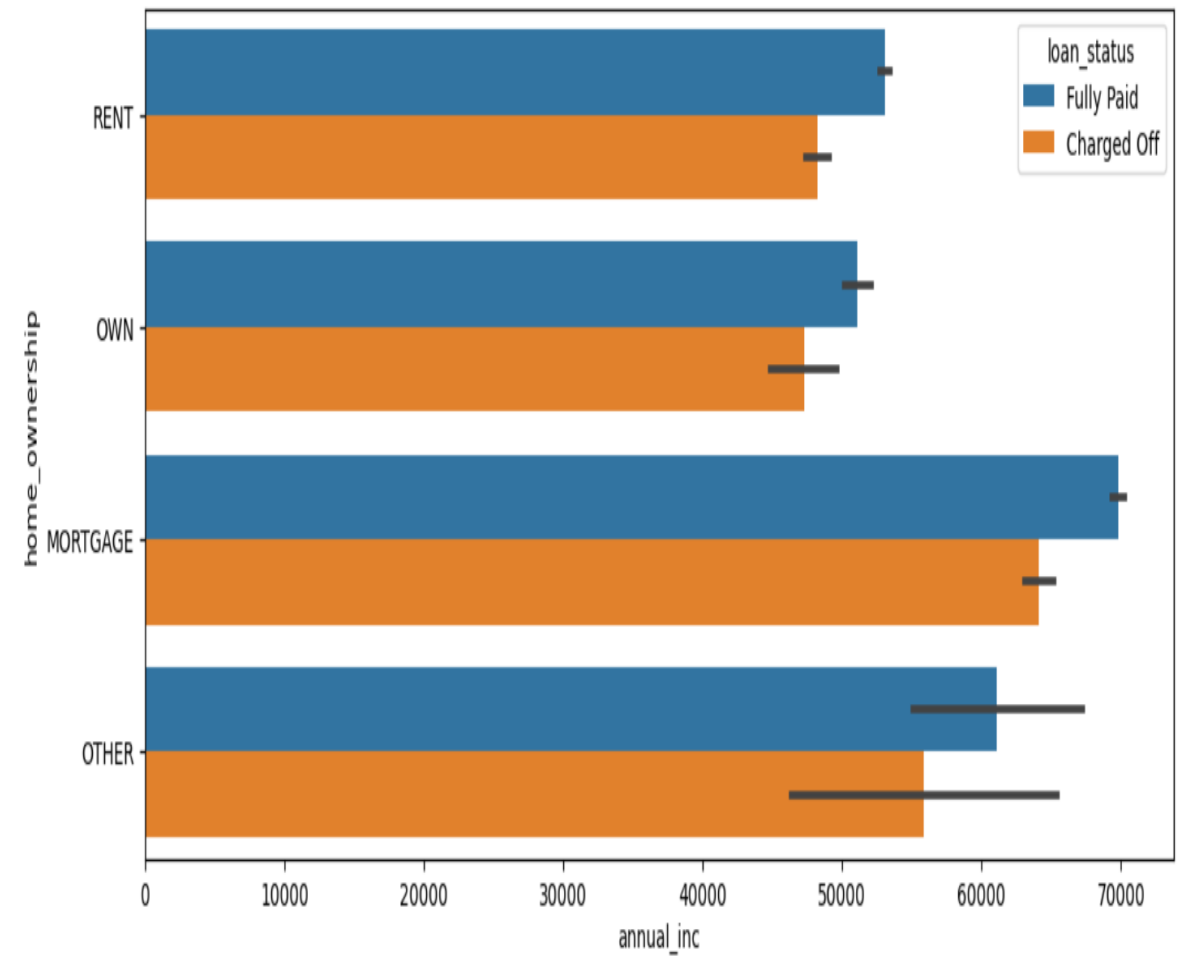
Loans with high interest rate (14% - 16%) having installments between 600 to 800 are more probable to default the loan







Employees having grade G with high interest rate (14% - 16%) are more probable to default the loan



Employees having home ownership as 'MORTGAGE' with high annual income (60k to 70k) are more probable to default the loan



**THANK YOU**

