



# CREDIT EDA CASE STUDY

By Vivek Shokhanda

# Problem

- Loan providing Companies provide loans to the customer. However there is always a risk weather the customer will pay the loan back or not.
- If the loan is not provided to the customers who can pay back then it will be loss for the company.
- If the loan is provided to the customer who can not pay then also it will be the loss for the company.

# Business Objective:

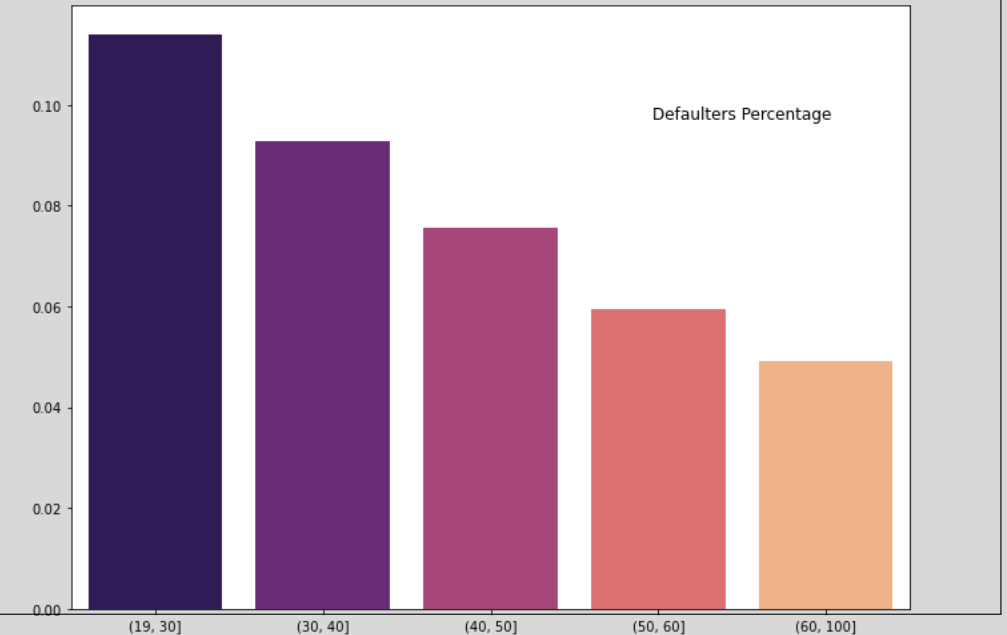
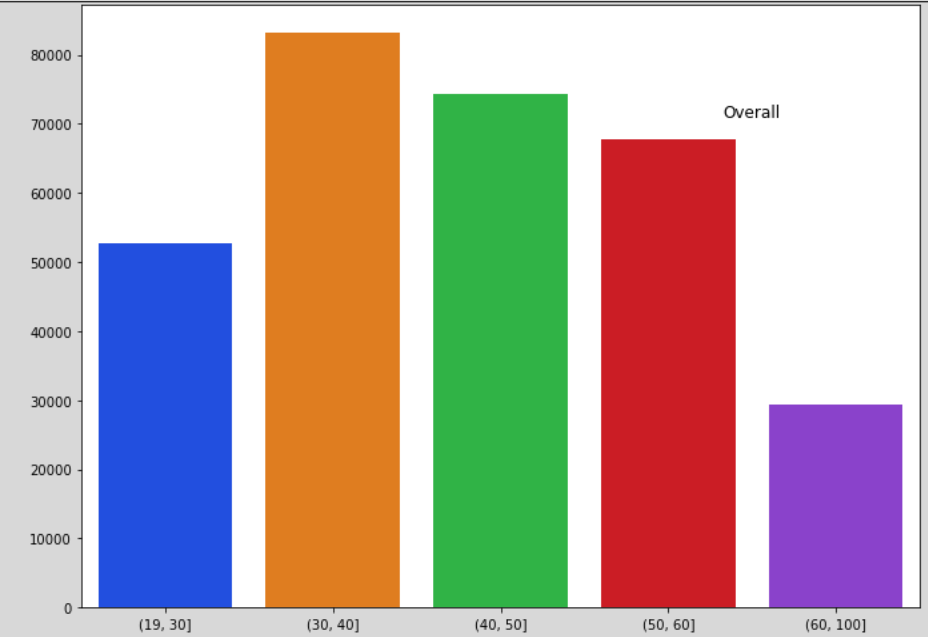
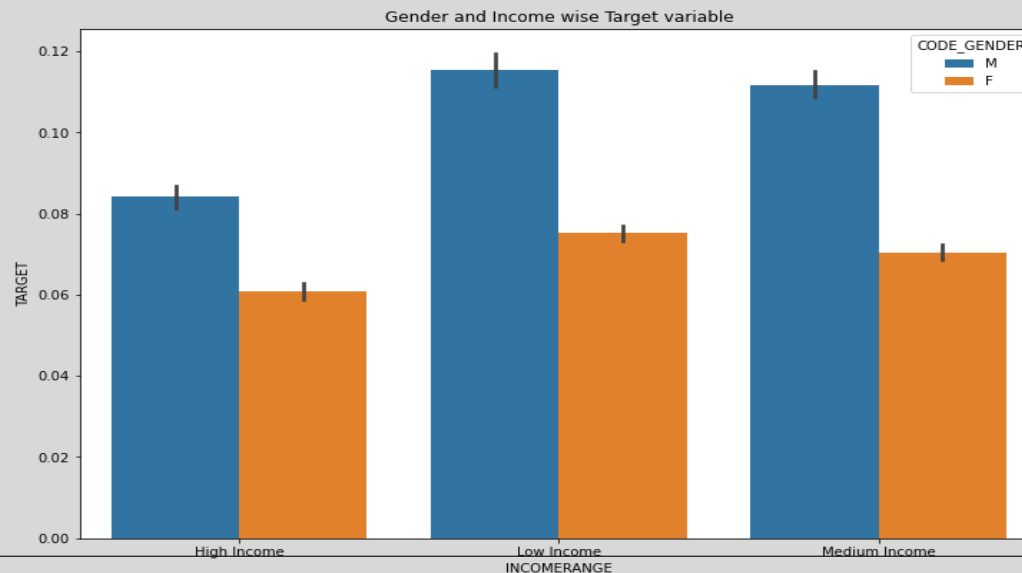
- This analysis aims at minimizing the risk for the company by identifying trends and patterns in the data which will help the company to identify the potential loan defaulters. So that either loan can be refused to them or the loan amount can be reduced or the rate of interest can be increased for such customers.

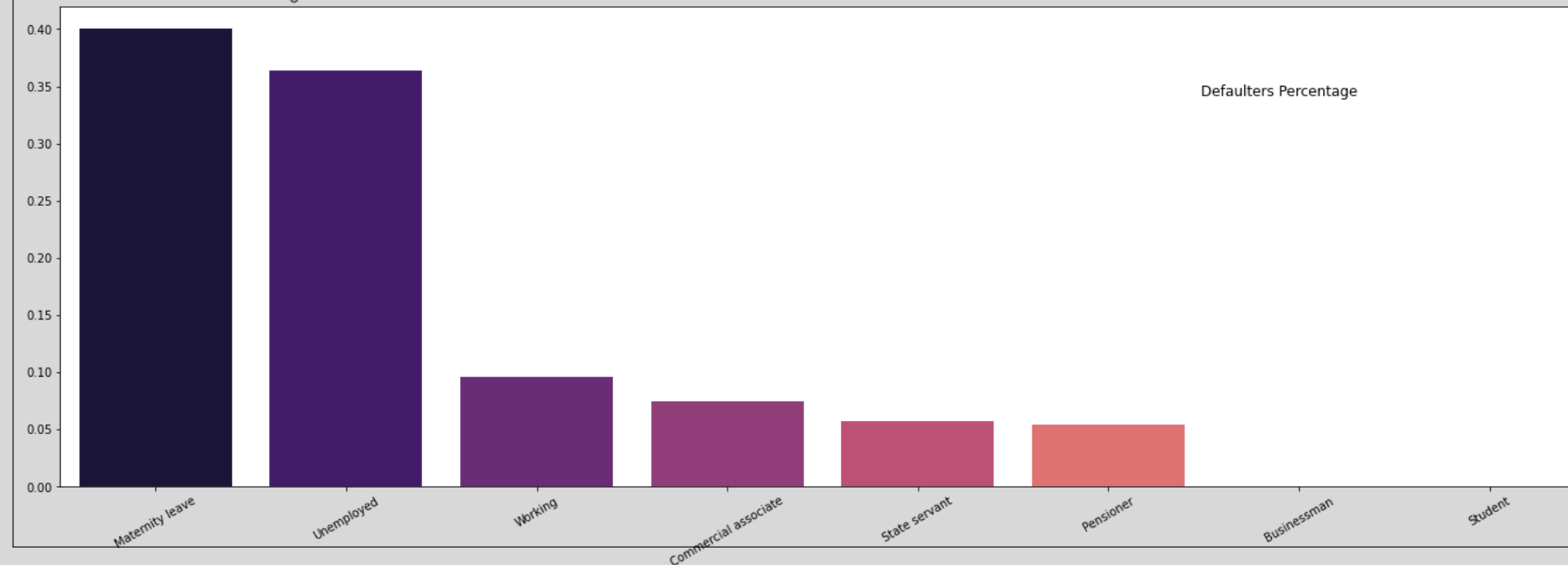
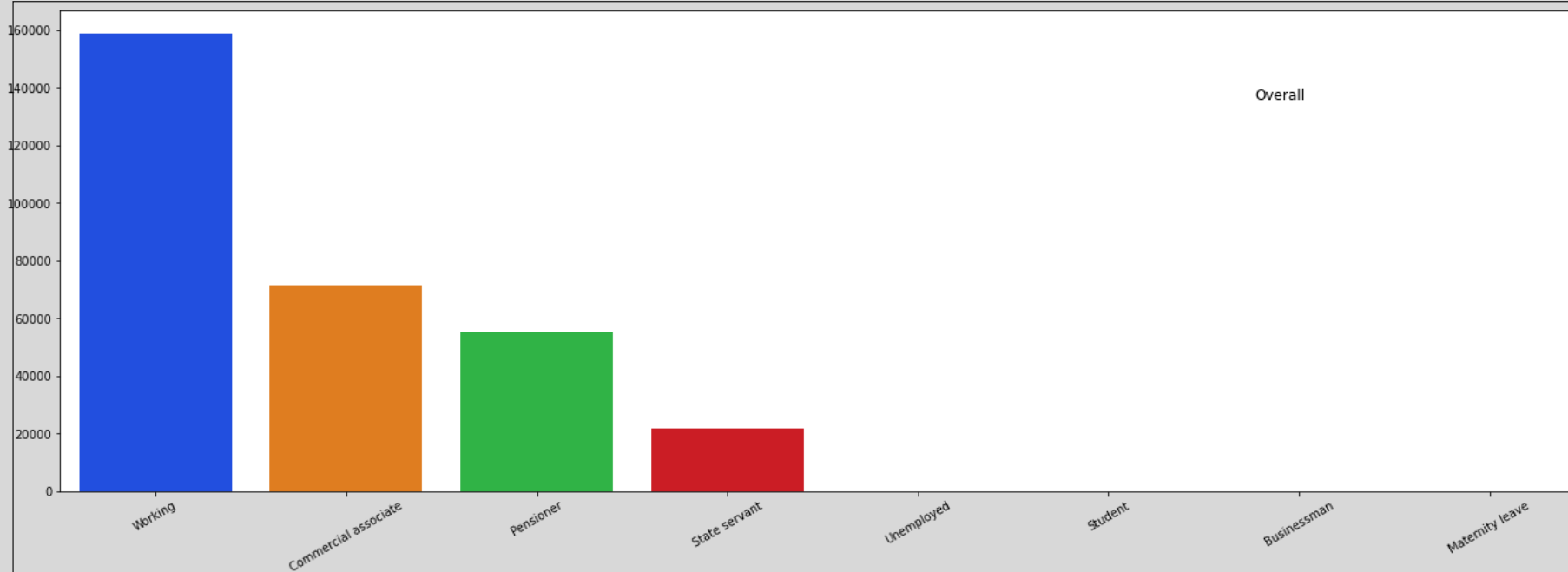
# Steps take in the below analysis:

1. Understanding the data, variables and domain
2. Importing the correct data
3. Thoroughly checking the structure and meta data
4. Missing values check and imputing values(if necessary)
5. Outlier check and data imbalance check
6. Performing univariate analysis, segment univariate analysis & bivariate analysis

# Analysis

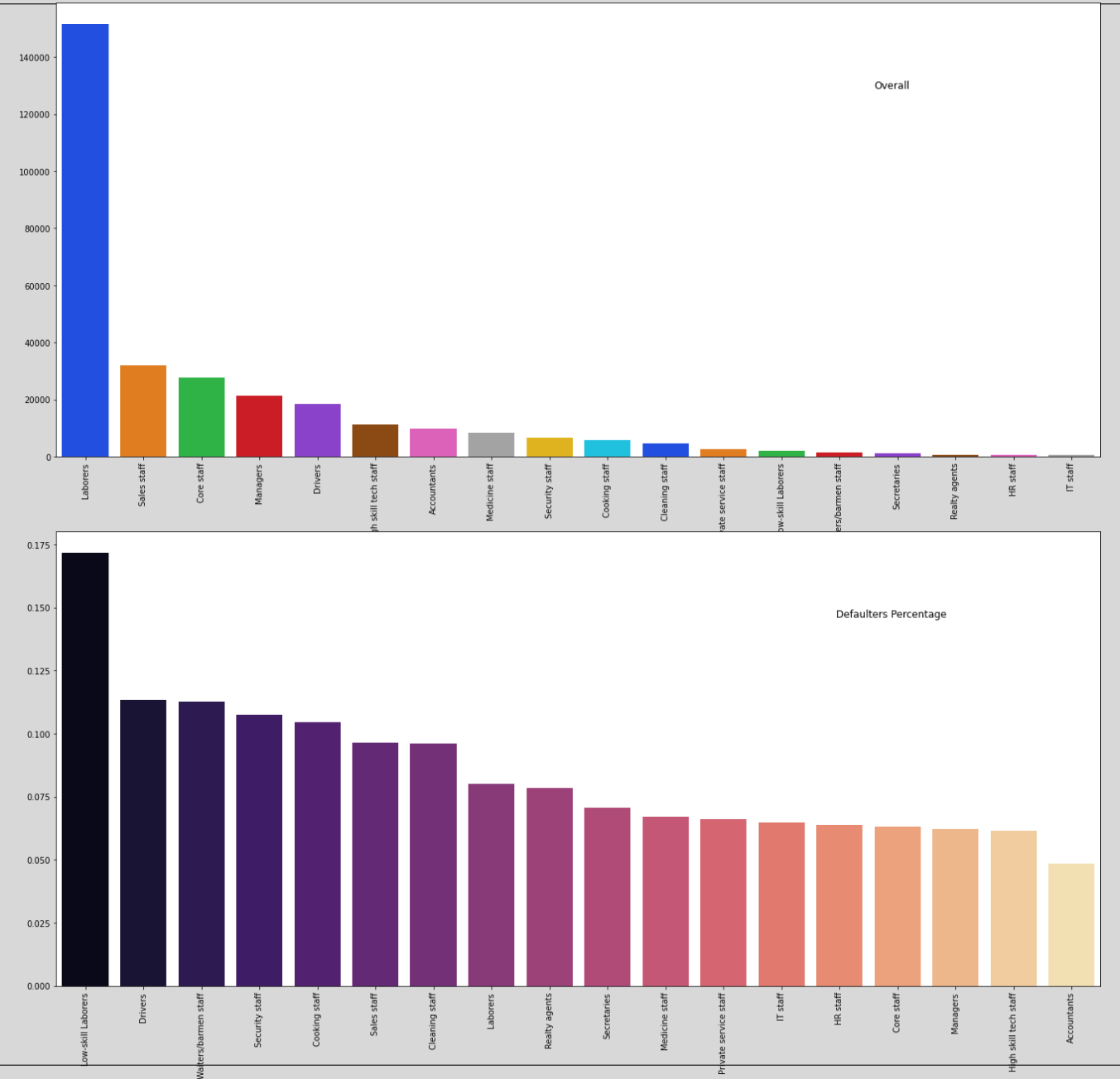
- Although in the data set there is imbalance in gender data in the favour of females, male tends to default in all income range
- Young Age people default on payments more and trend decreases with increase in age.

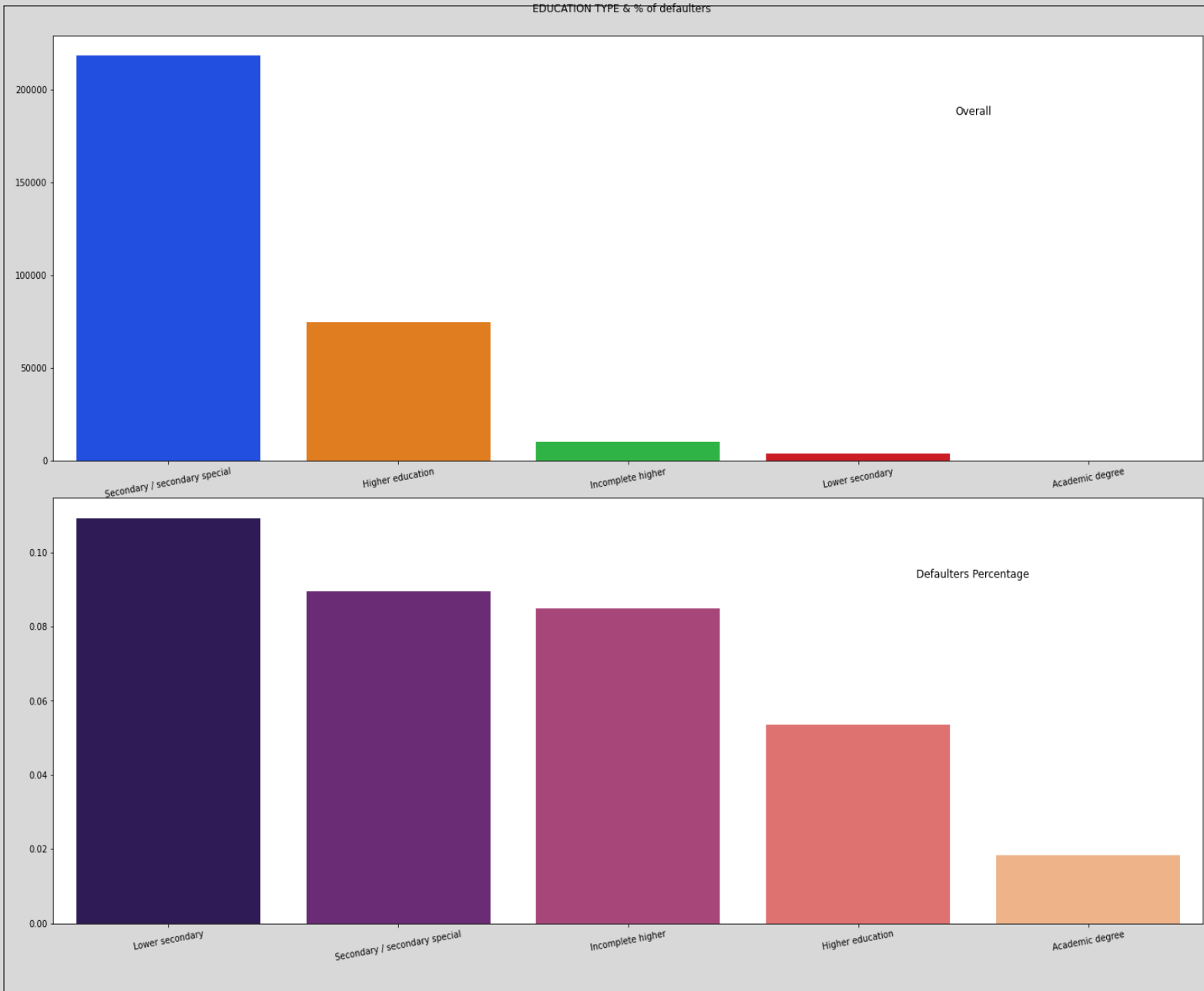




- Maximum people applying for loan earn from working or commercial associate.
- Maximum percent of people with income type as maternity leave or are unemployed tends to default on loan payments.

- If we talk about the occupation of the people applying for loan, labourers are on top followed by sales staff and core staff.
- But maximum percent of people defaulting on payments are from the occupations :Low skilled labourers, Drivers, waiters/barmen staff.
- Accountants, High skill tech staff and manager are very less likely to default.

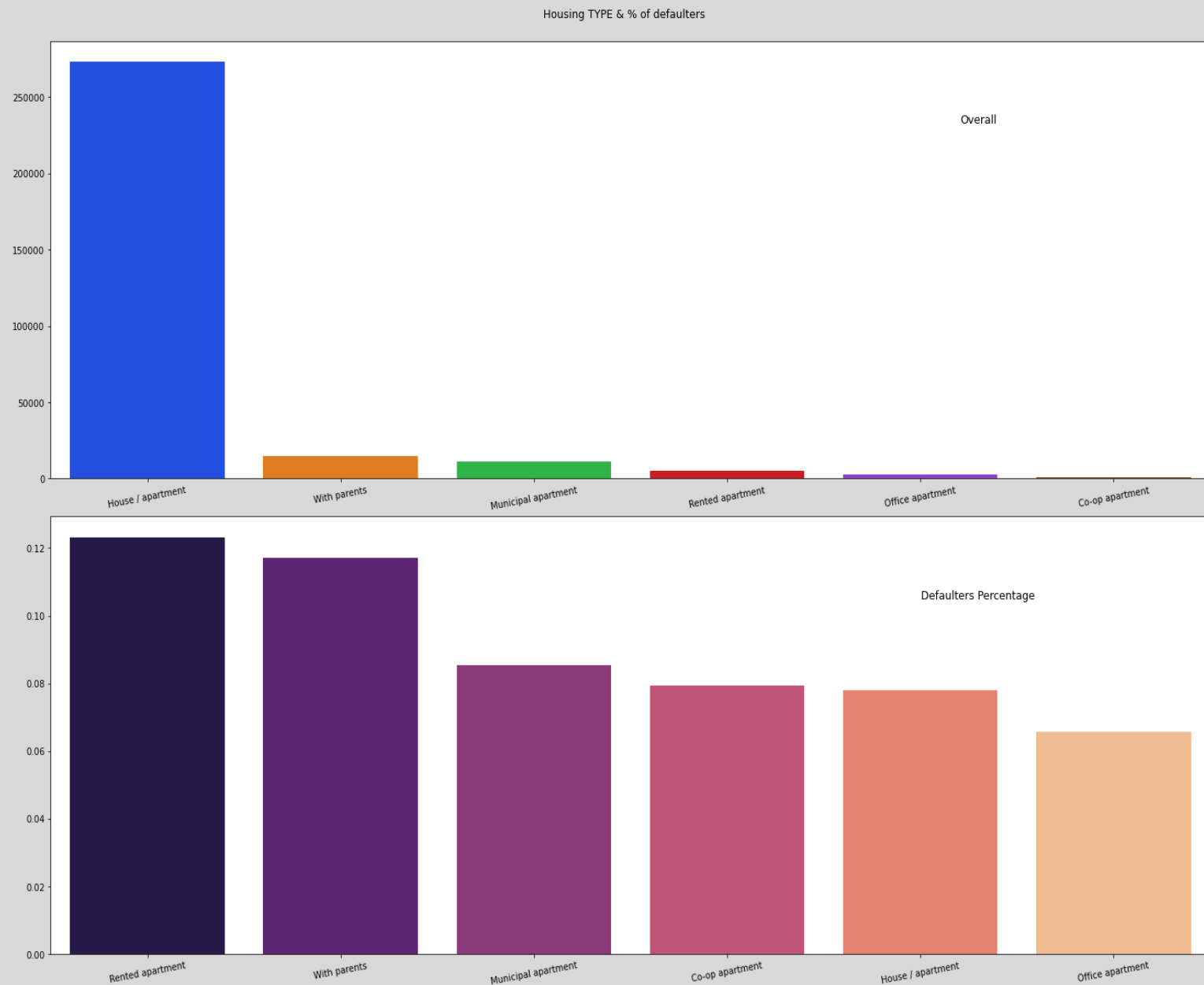




- People with education up to secondary/secondary special and higher education need loans more than others.
- Although people with lower secondary education take loan very less as compared to others but they tend to default more than others.

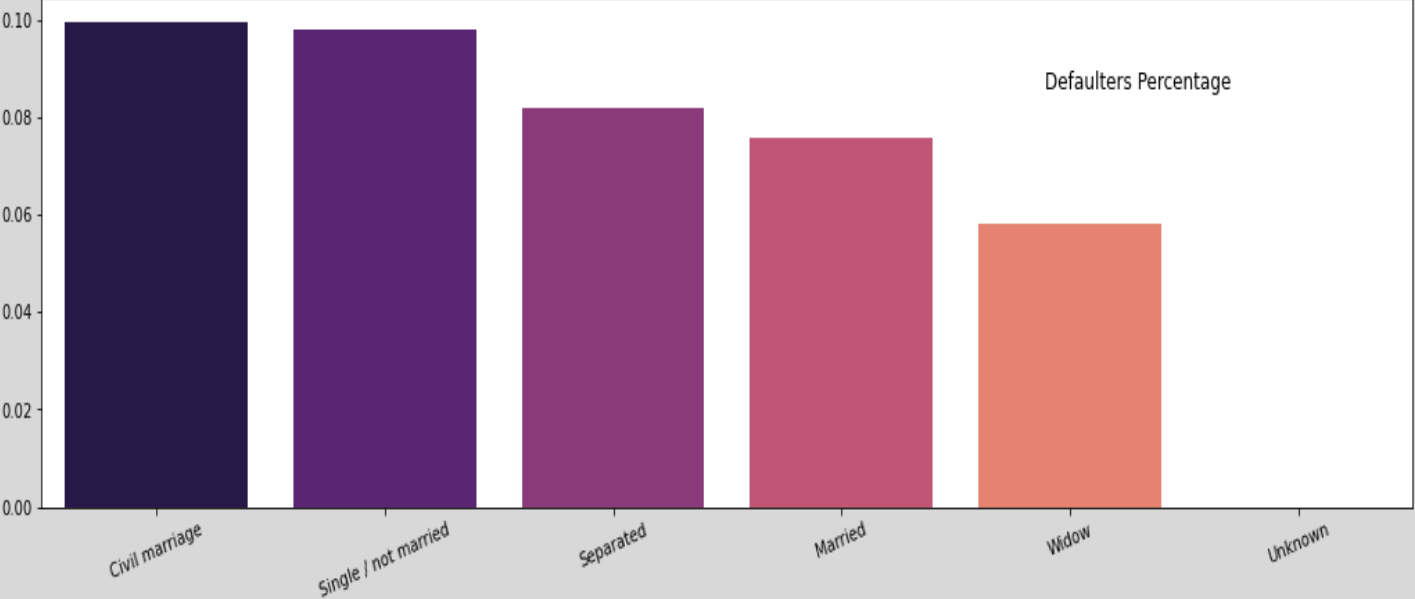
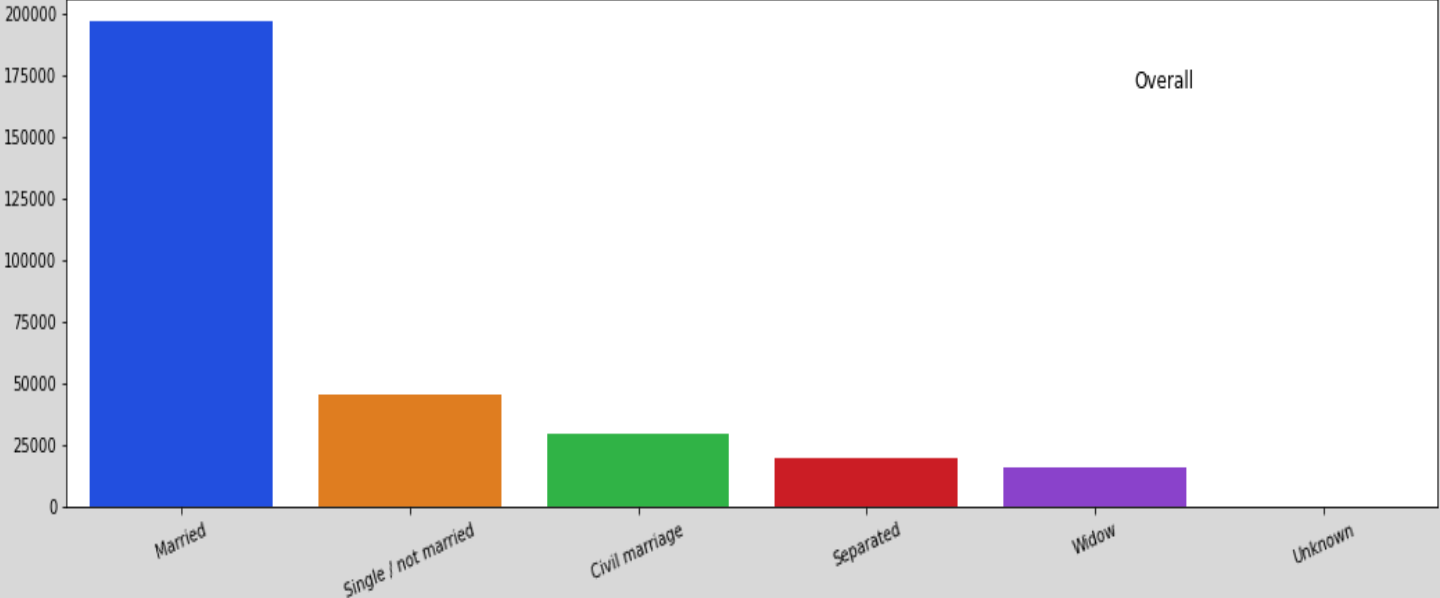
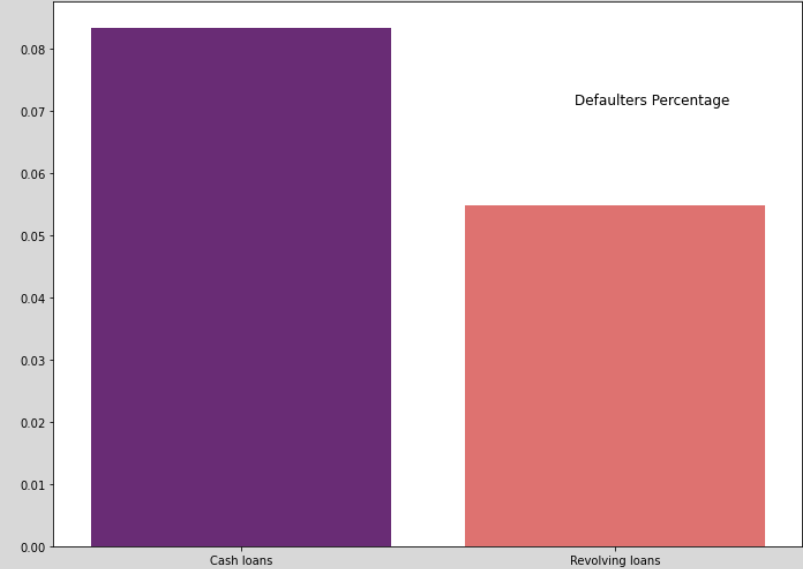
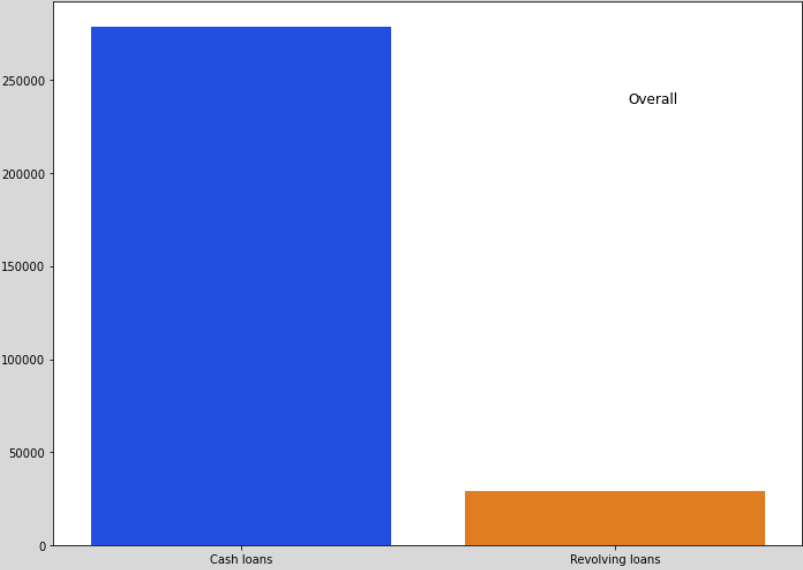


- People who live in rented apartment or with parents tends to default more on loan payments then people living in House/Apartment or office apartments.



Family Status & % of defaulters

LOAN TYPE & % of defaulters



- More people take cash loans then revolving loans
- More people default on cash loan then revolving loans
- Married people take most loans among Family Status category.
- But Civil Marriage and Single/ Unmarried category people default more then others

# Conclusion

- Loan companies should focus more on contract type 'Student' , 'pensioner' and 'Businessman' with housing 'type' House/ apartment or office apartment for successful payments.
- Loan Companies should focus less on income type 'maternity leave' and unemployed as they are having most number of unsuccessful payments.
- Also with education type as Higher secondary or academic degree people default less, so loan companies should focus on them .