Credit EDA Assignment Case Study Report

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Overview

Banks/Companies receive thousands of applications every month for new loans. It becomes a tedious task to manage all of them.

- Credit risk analysis will help the company to make decision for loan approval based on the applicant profile.
- This helps in controlling the loss and profits of the business to the company and avoid financial loss.

Steps Involved

- Data understanding and sourcing.
- Check for data quality issue and binding.
- Check for data imbalance and univariate, segmented univariate & bivariate analysis, correlation.
- Merging of application data with previous application data.
- Recommendation and risk

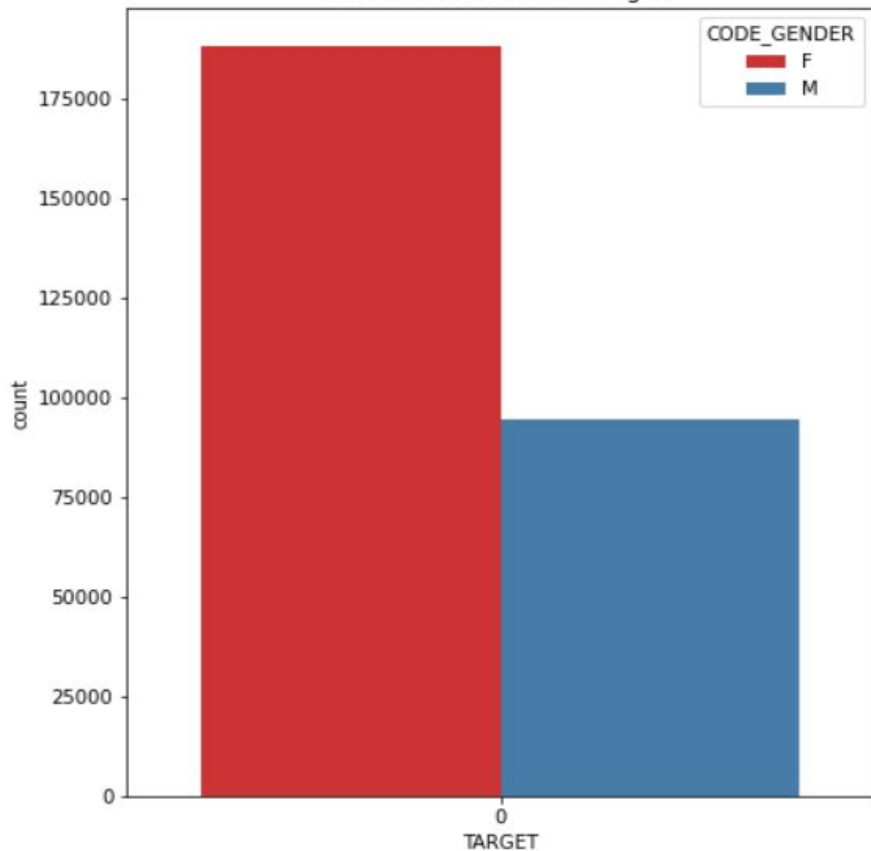# Data Imbalance for Target Variable

Data imbalance

Defaulted Population(TARGET=1)

8.1%

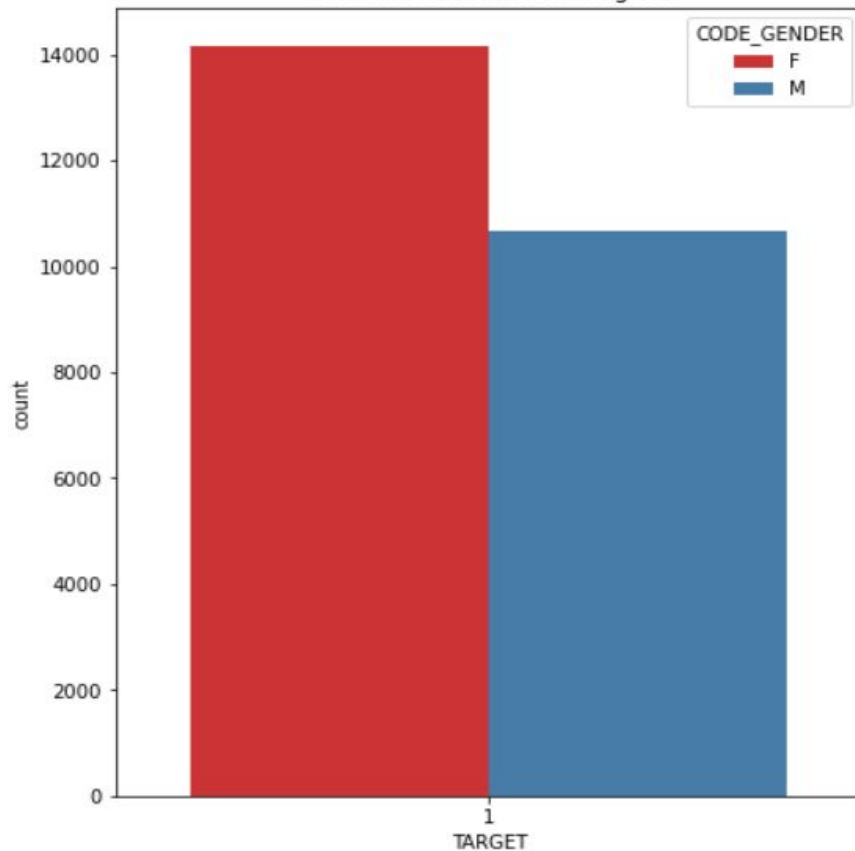91.9%

Non-Defauted Population(TARGET=0)
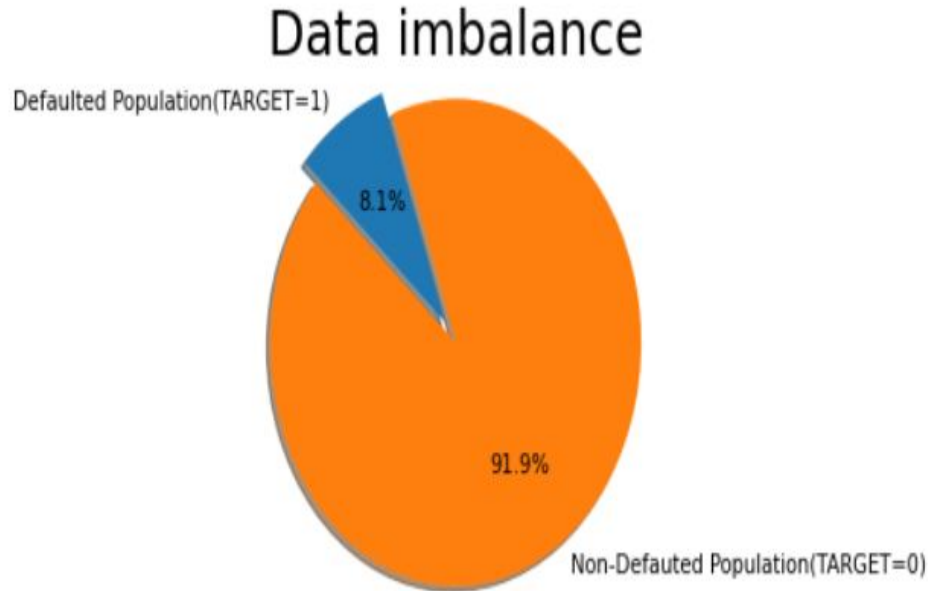
- There are around 8.1% of applicants who are defaulted and 91.9% applicants who are non-defaulted.

- The ratio to defaulted and non-defaulted applicants is 1:11.3

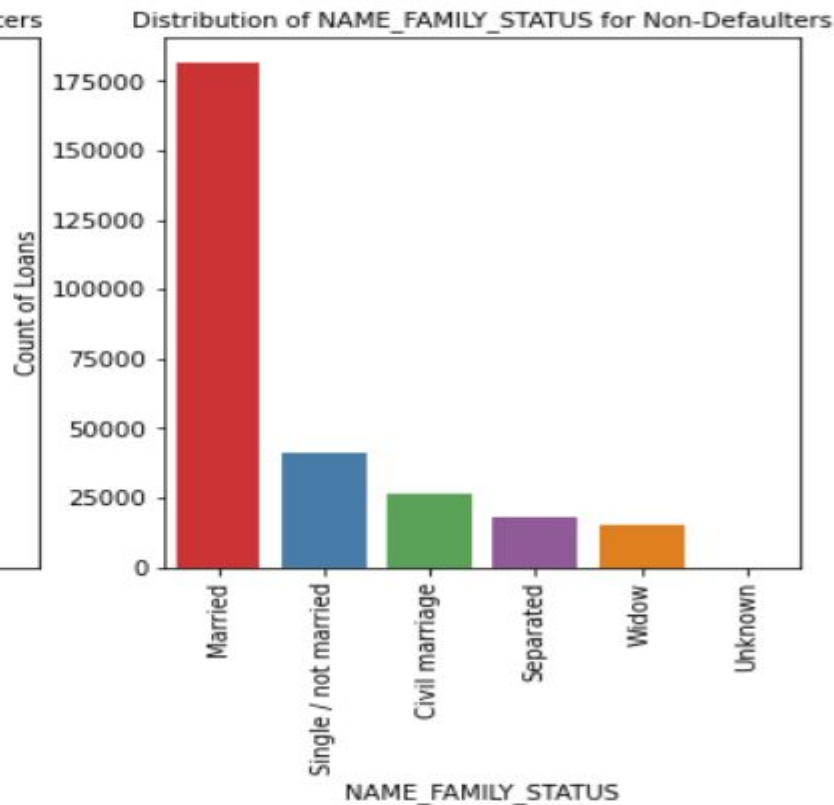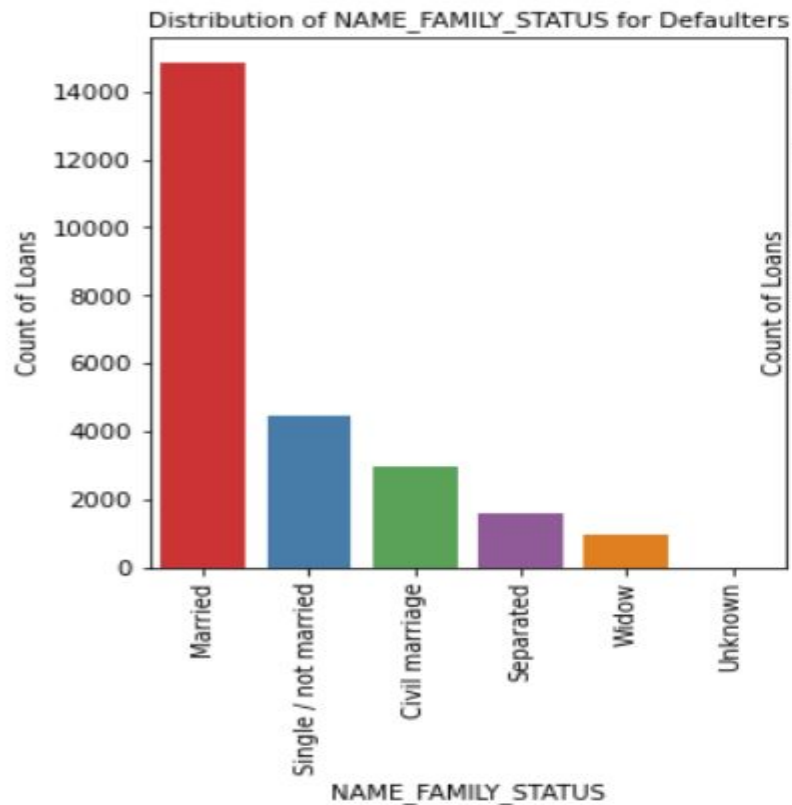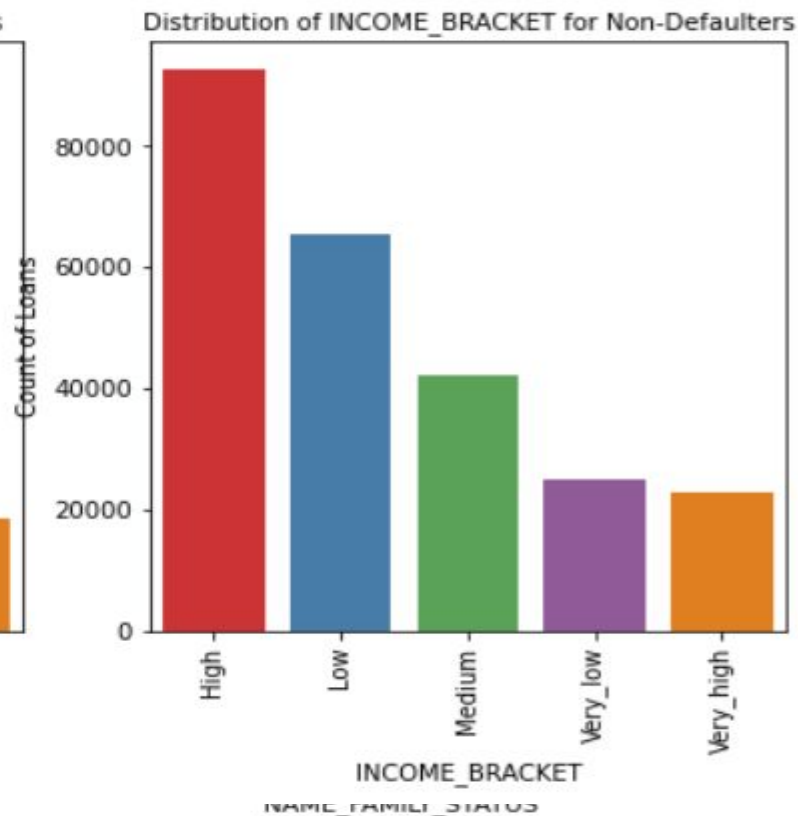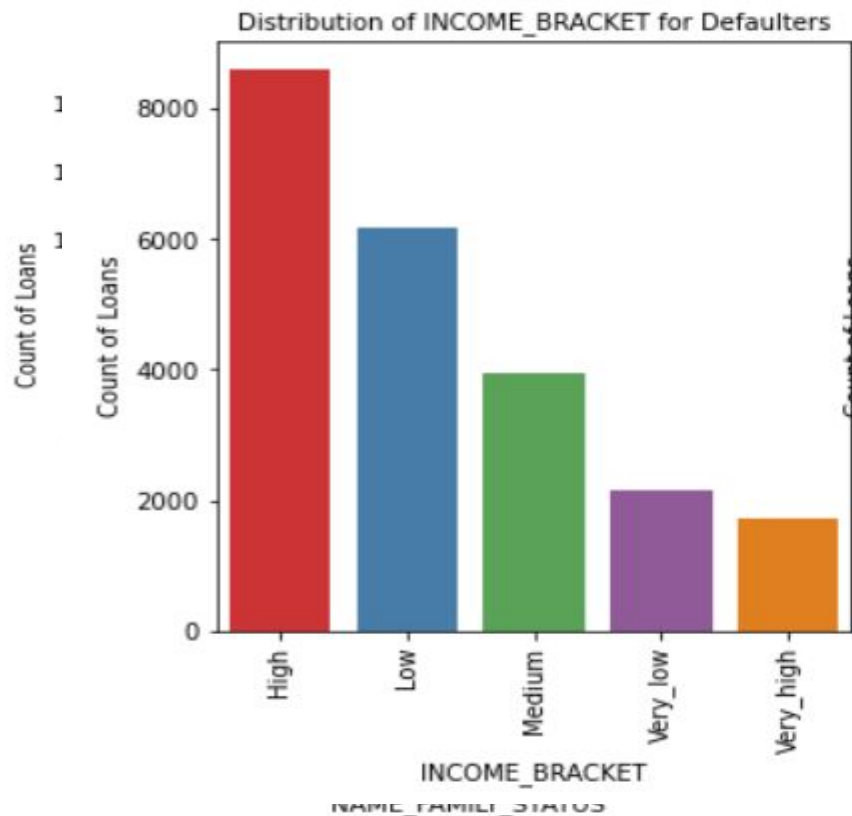# Gender Distribution of Applicants

Distribution of Applicant Status

Distribution of NAME_FAMILY_STATUS for Defaulters

Distribution of NAME_FAMILY_STATUS for Non-Defaulters
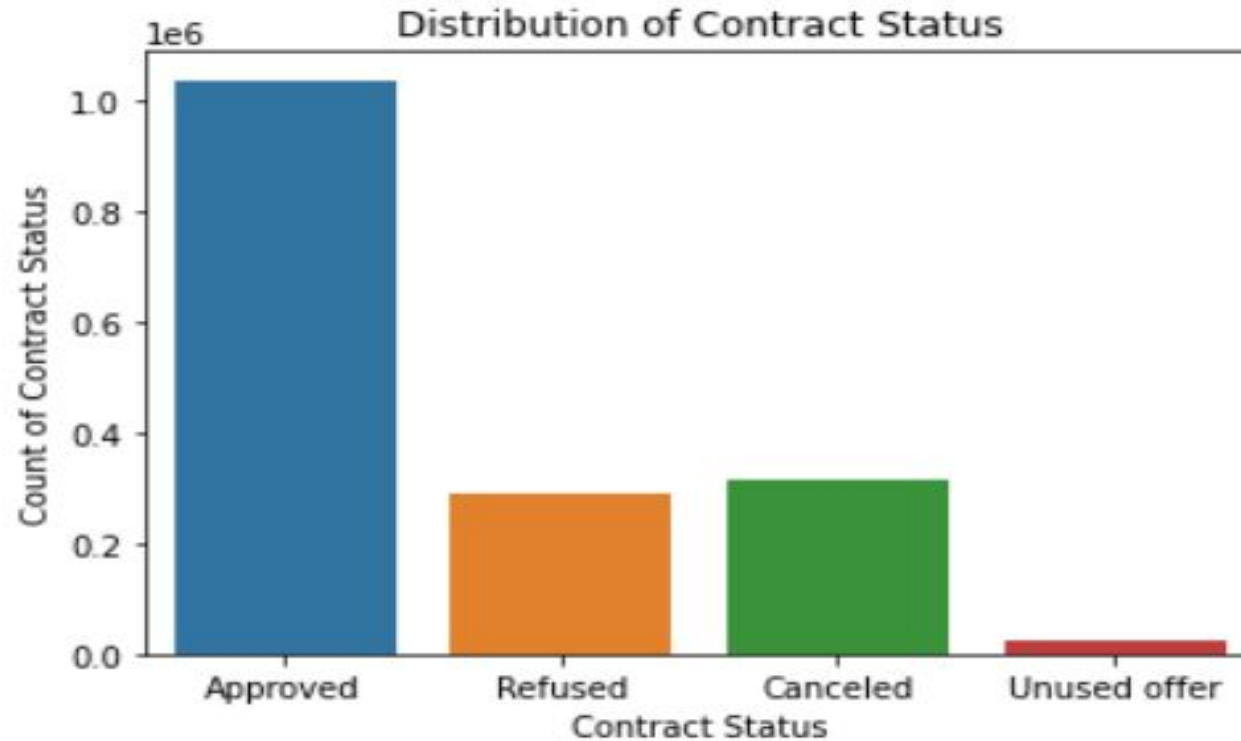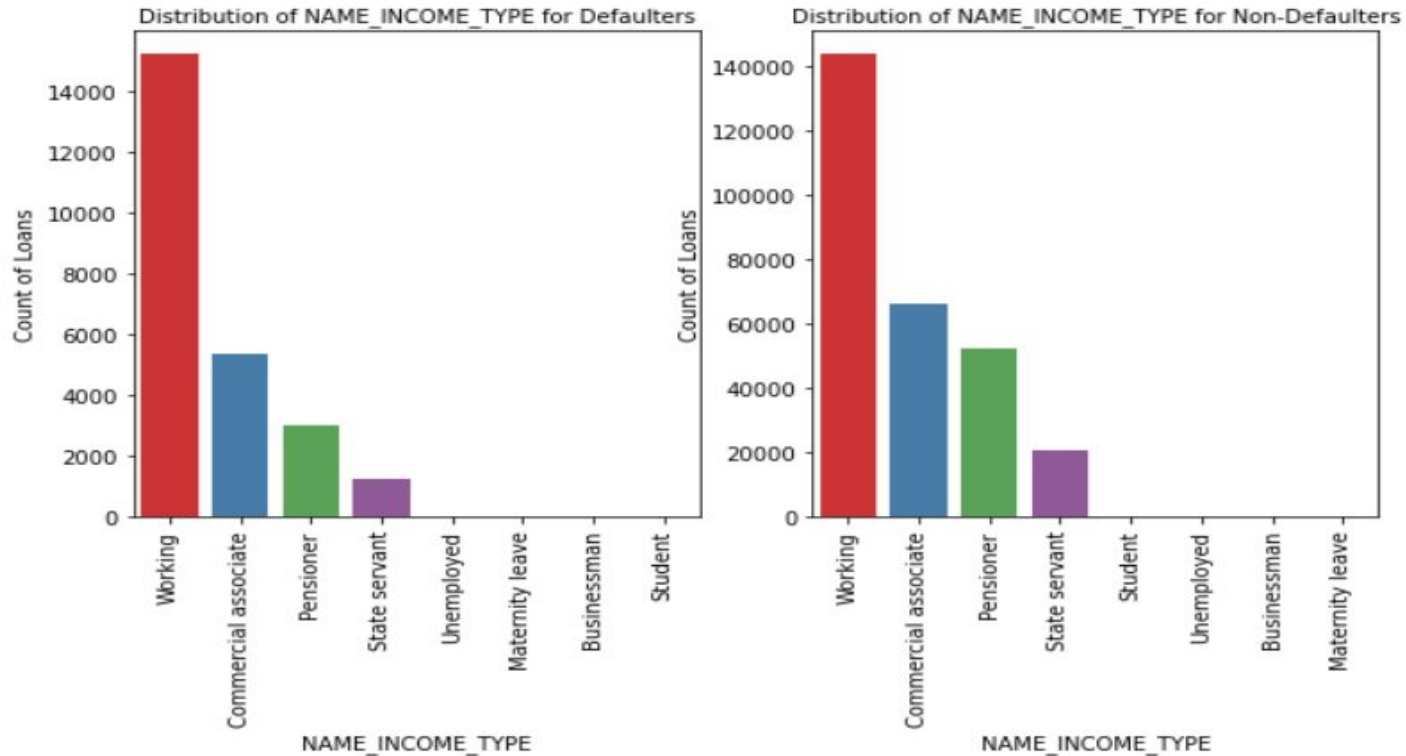
Distribution of Income Bracket

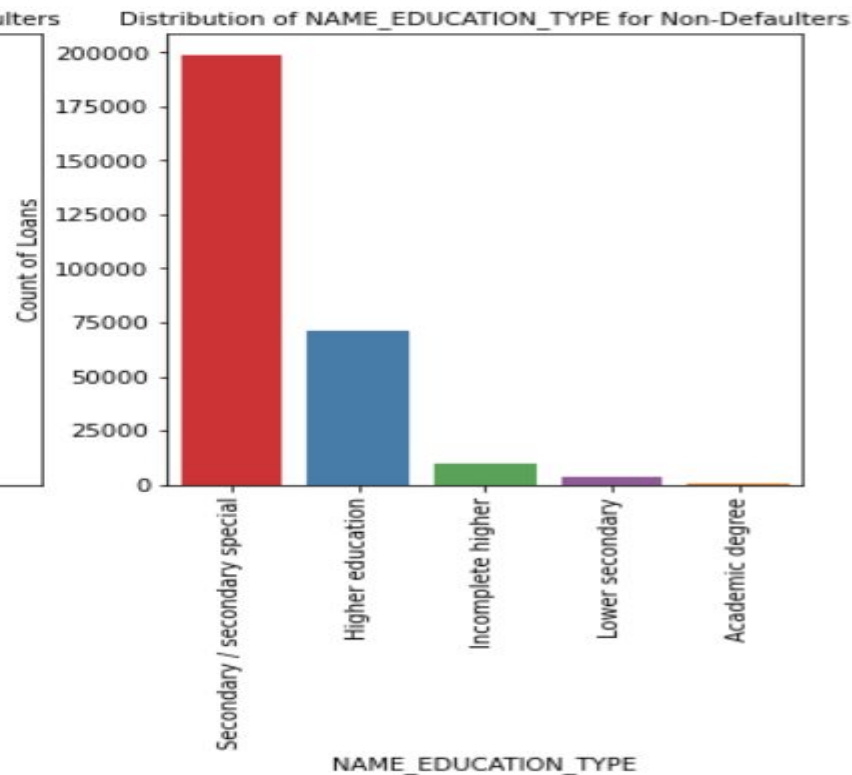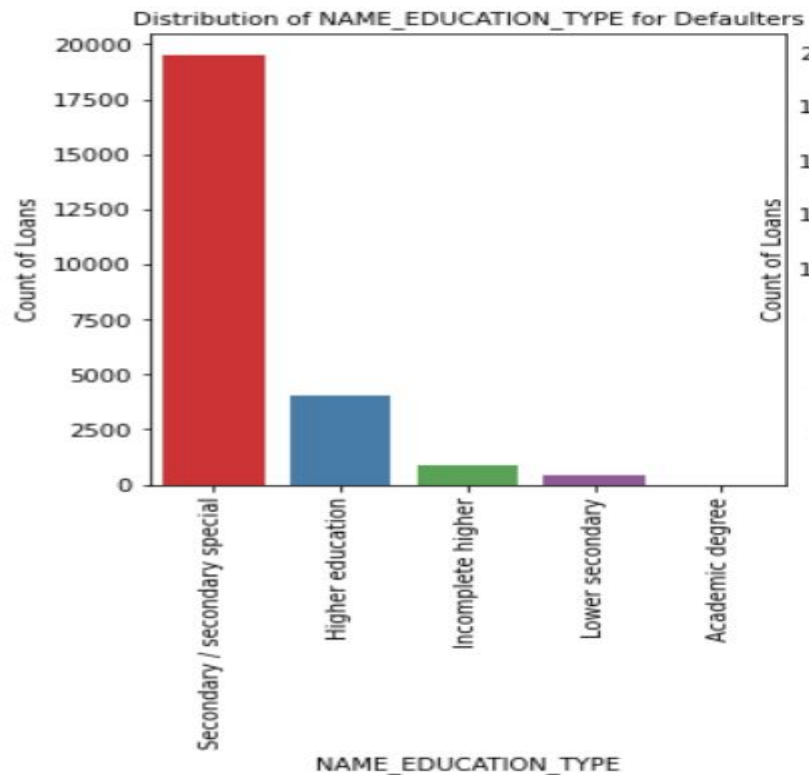# Distribution of Ratings for Applicants
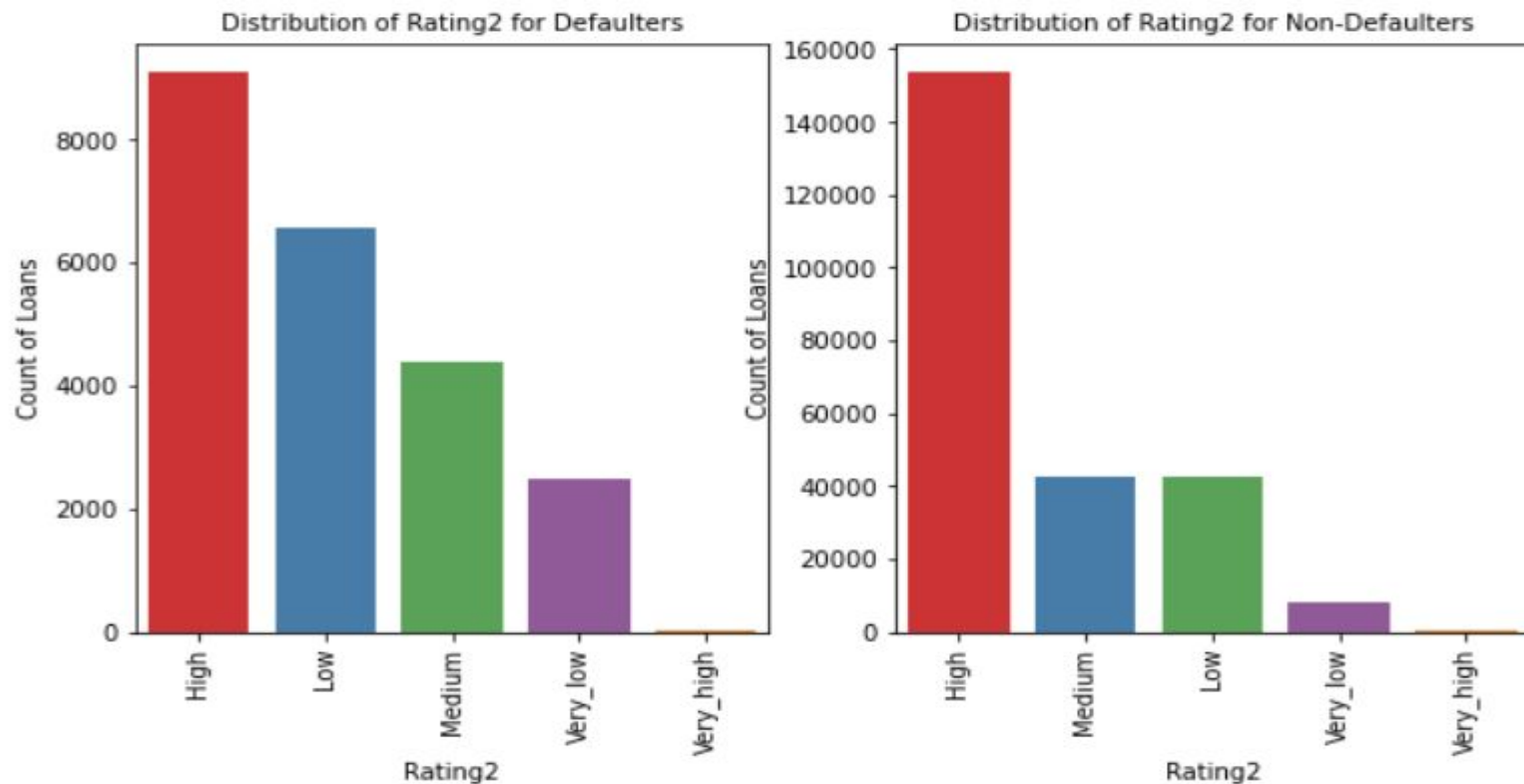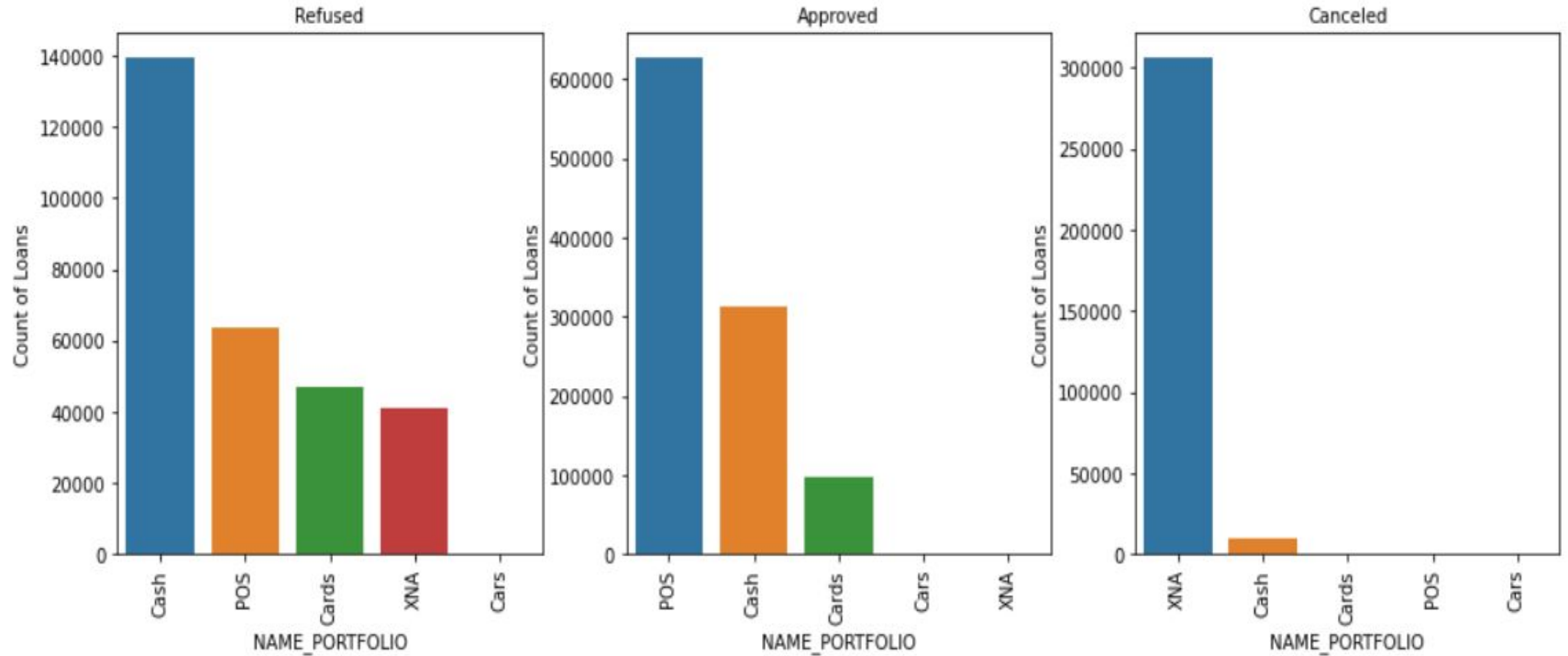
Distribution of Contract Status

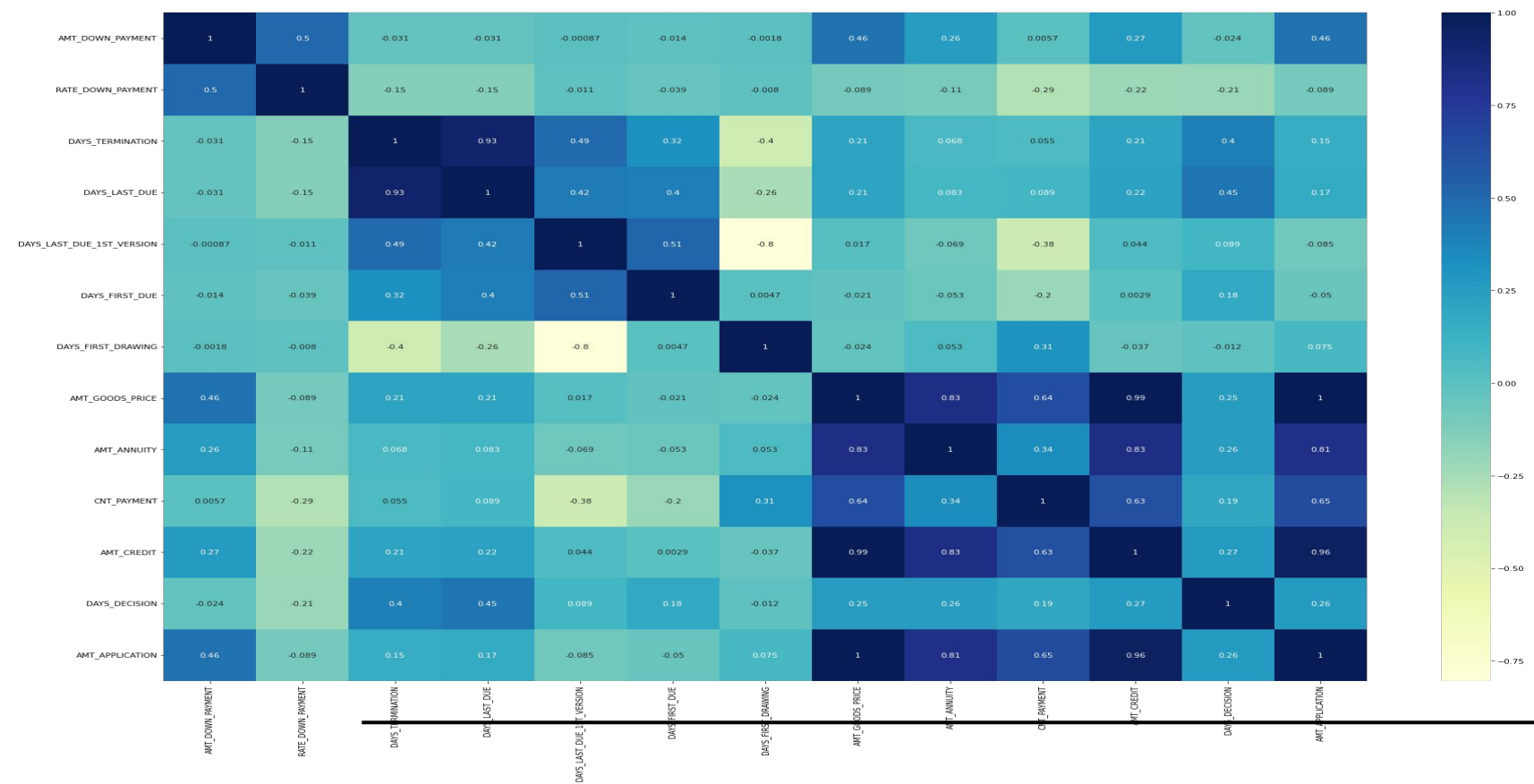# Distribution of Income Type Applicants

Distribution of Education Type for Applicants

Distribution of Name Portfolio

Correlation Heatmap for Approved Applicants

Loans can be credited to the following groups

- Clients who are working as a state servant.
- Old people of any income
- Client with high income category
- Old female client
- Client with higher education
- Any client who's previous loan was approved
- Refreshed client who has unused loan status previously

Risky Group

- Lower secondary educated clients are the most in number to be a defaulter when their previous loan was cancelled or refused.
- Male clients with civil marriage
- Previously refused loan status group

Thank You!!!