2022

Credit EDA case study report

CREDIT EDA CASE STUDY

AJMERI DHRUV CHETANKUMAR

In this report we'll look at some of the most important insights form the data provided in the dataset:

Here we can see from the graph that the majority of people who are applying are Laborers, Sales staff and core staff
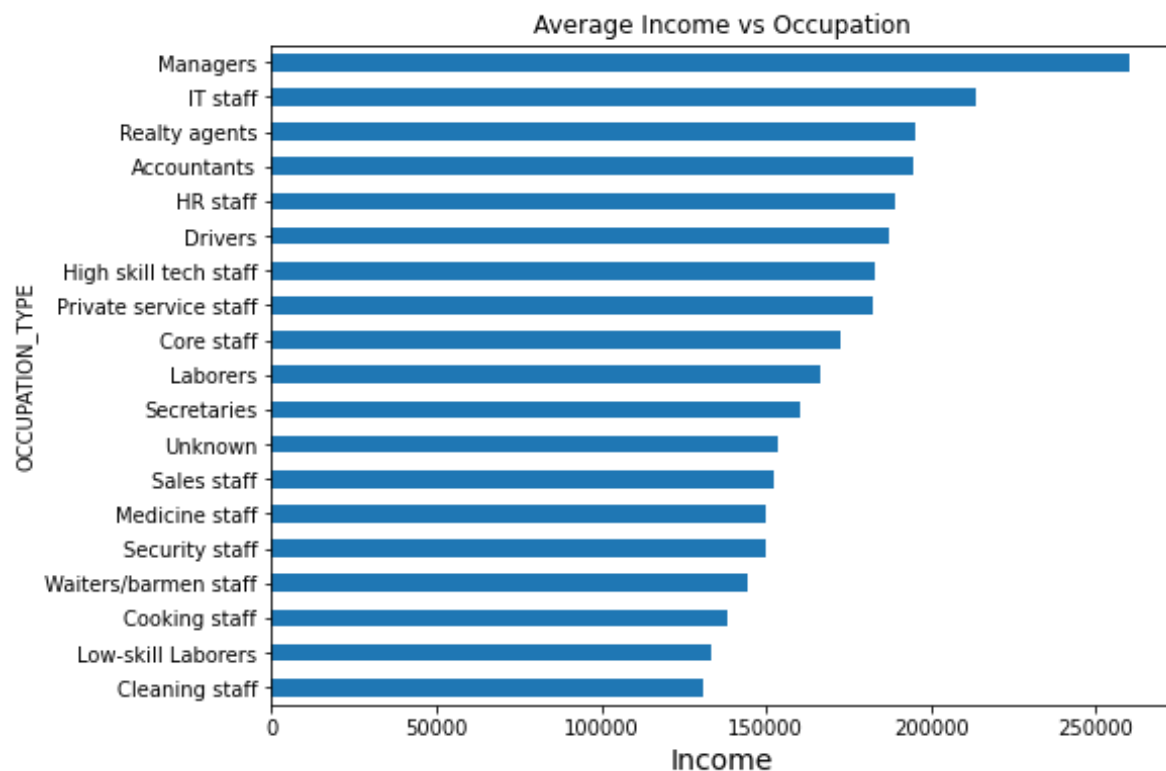
IT, HR staff and Realty agents are among the least applying for loans

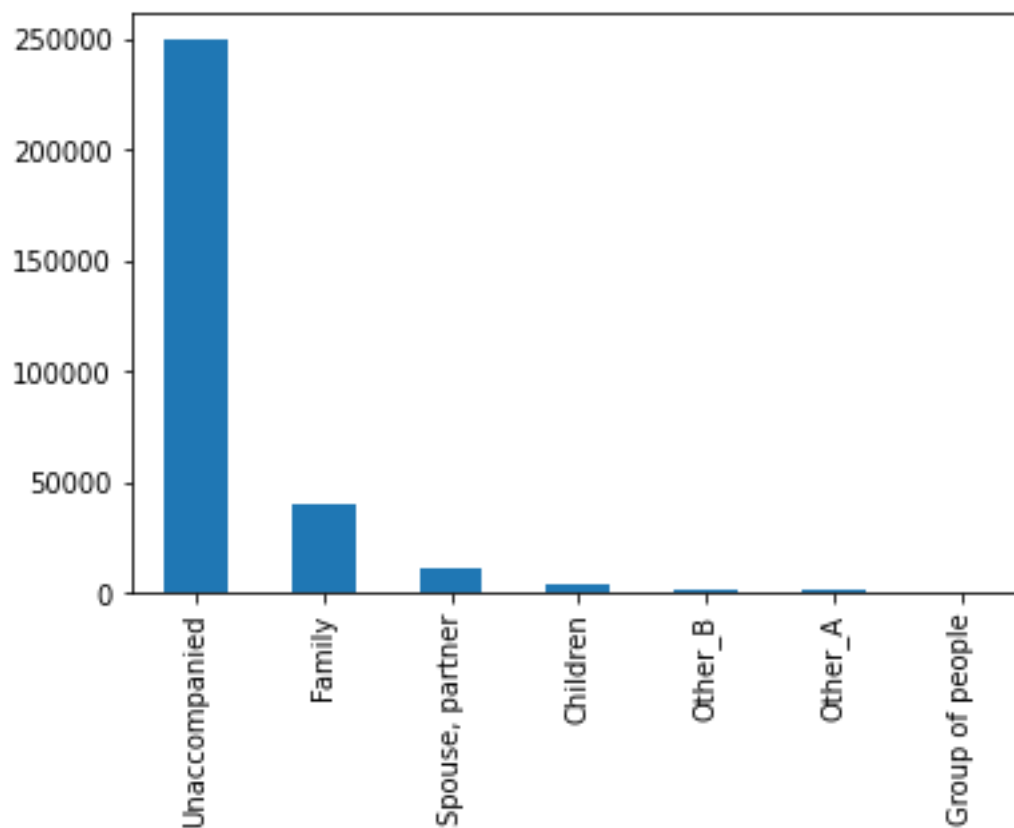**Number of people based on their Occupation Type**
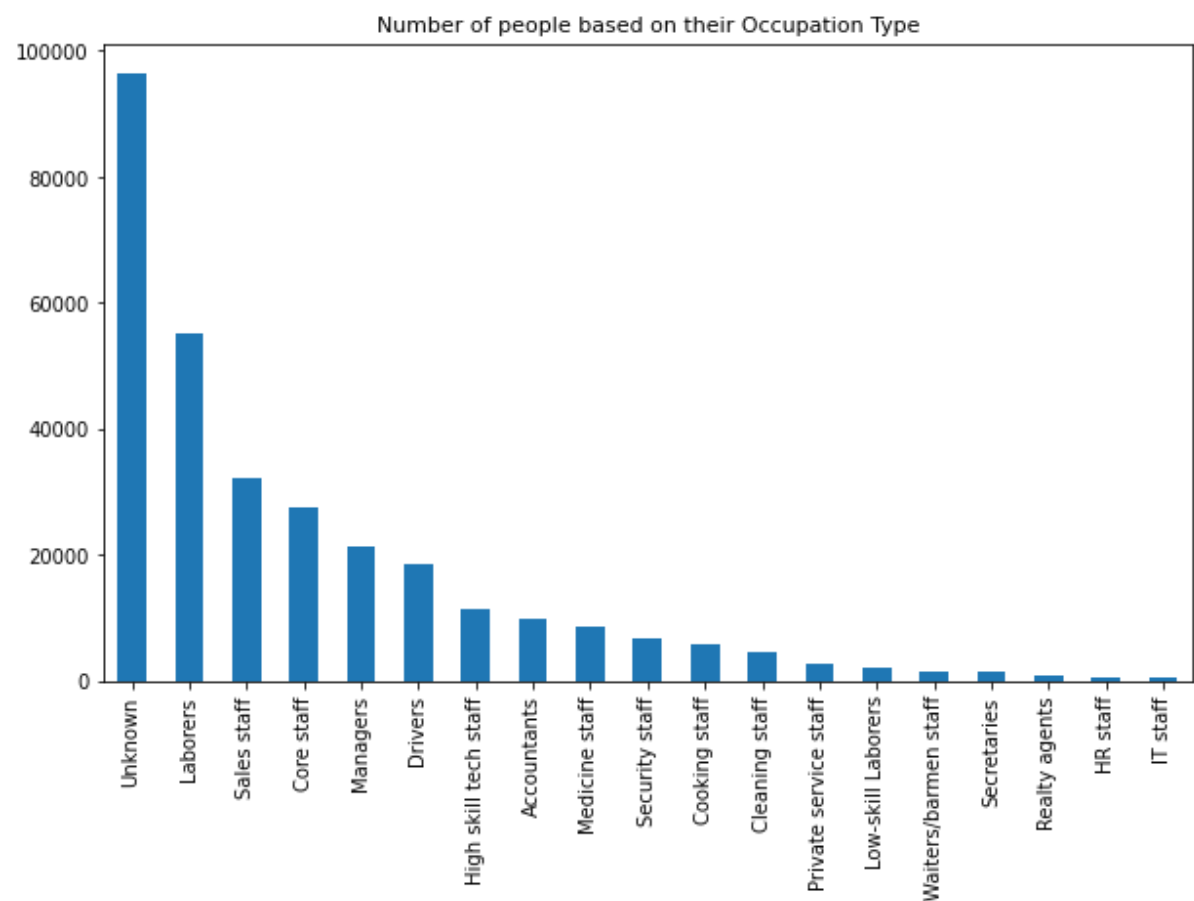
More than 65% of applicants do not own a car
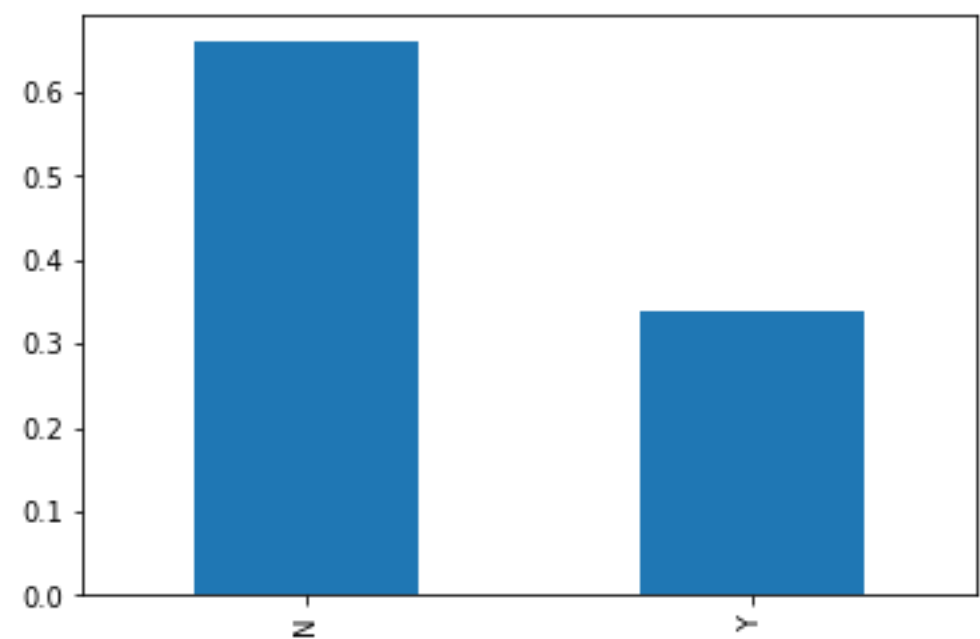
Here we can see that the Managers and IT staff receives among the highest salaries and the Cleaning staff is among the lowest salary receivers

Here we can see that the majority of the people are unaccompanied

Here we can see that the majority of people applying for a loan belong to
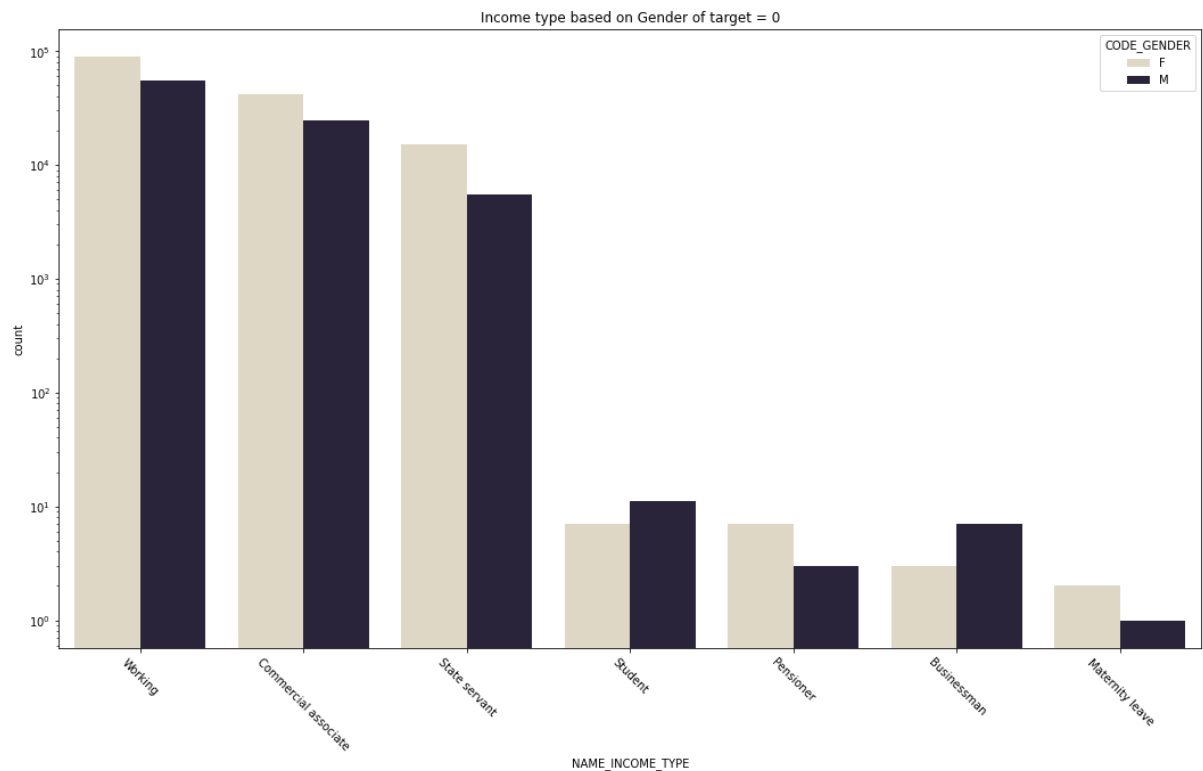Business Entity Type 3 and are self employed
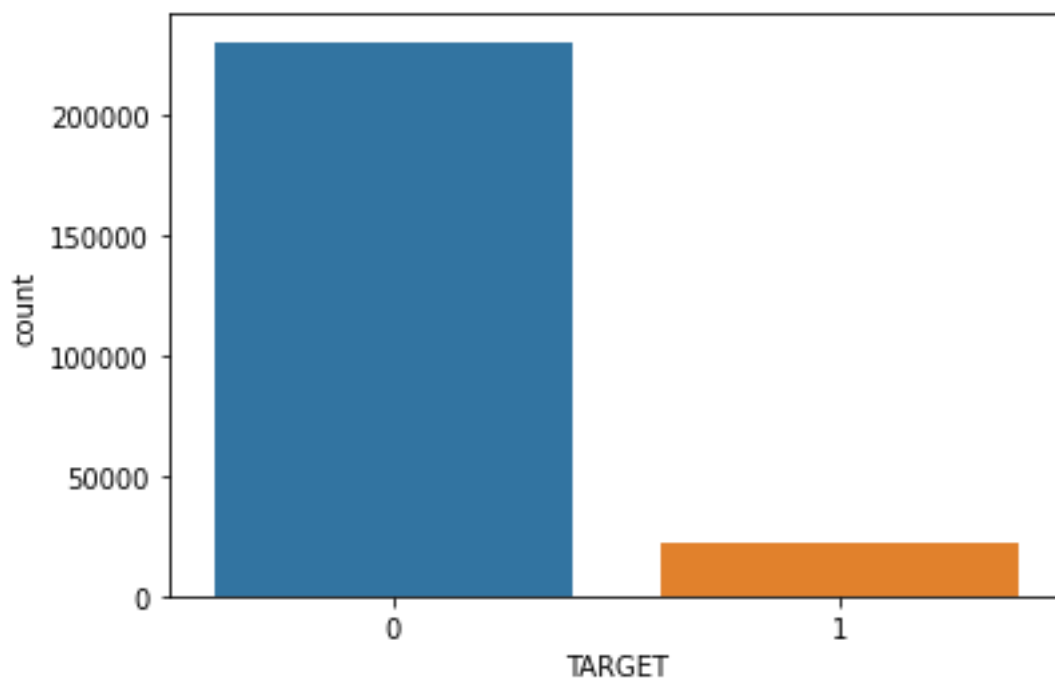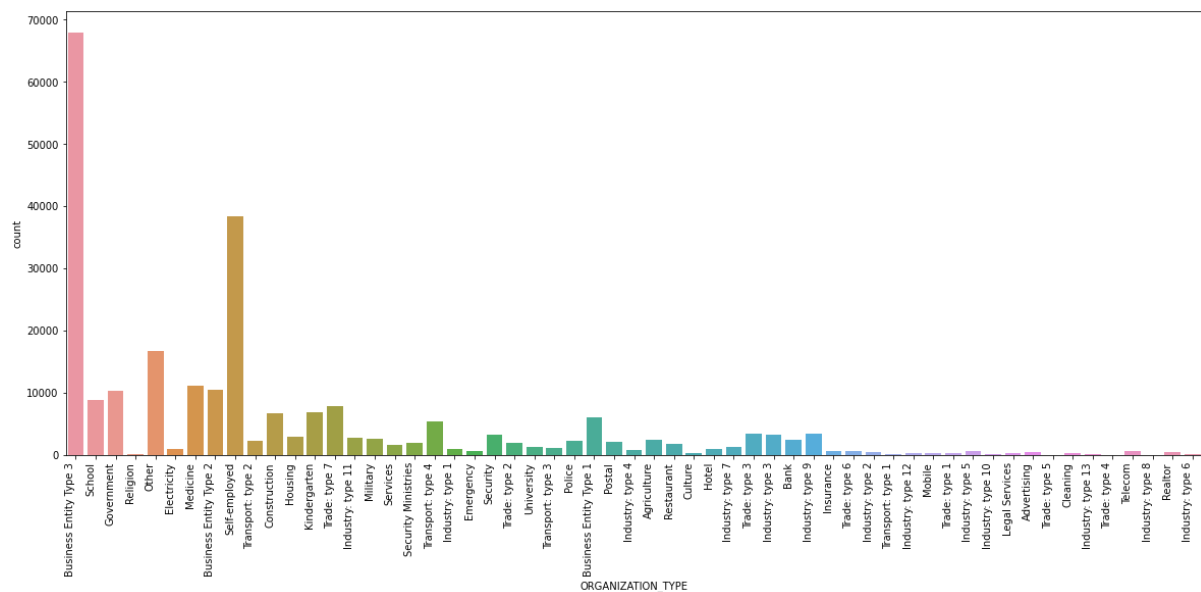
91% values are of TARGET = 0 that means 91% of the applicants don't have
any difficulties paying the loan back The number of females applying are
higher in 150000 - 180000, 120000 - 150000, 90000 - 120000 income
bracket than men

For 0 -30000 income bracket the men are not in huge numbers

Overall more females are applying for loans than men

Income discribution based on Gender of target = 0
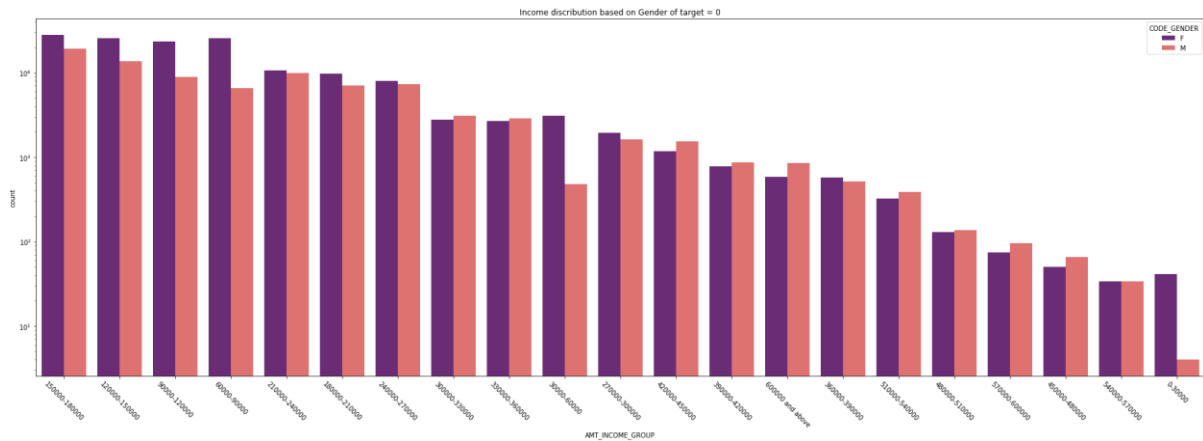
Working class, commercial associate, state servants are among the top loan applicants Students, Prisoner, Businessman and people on Maternity leave are among the leaset applicants for loan application
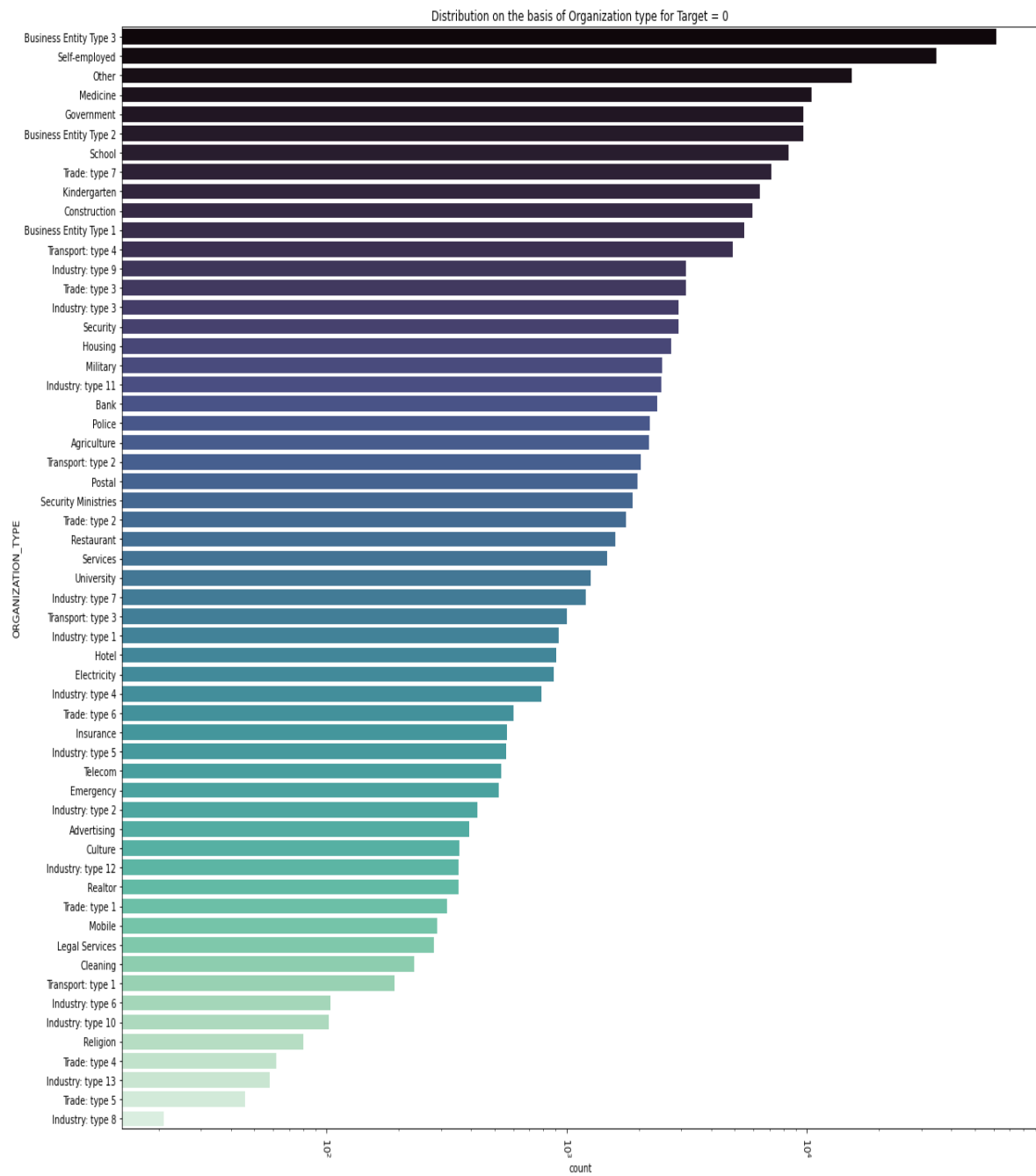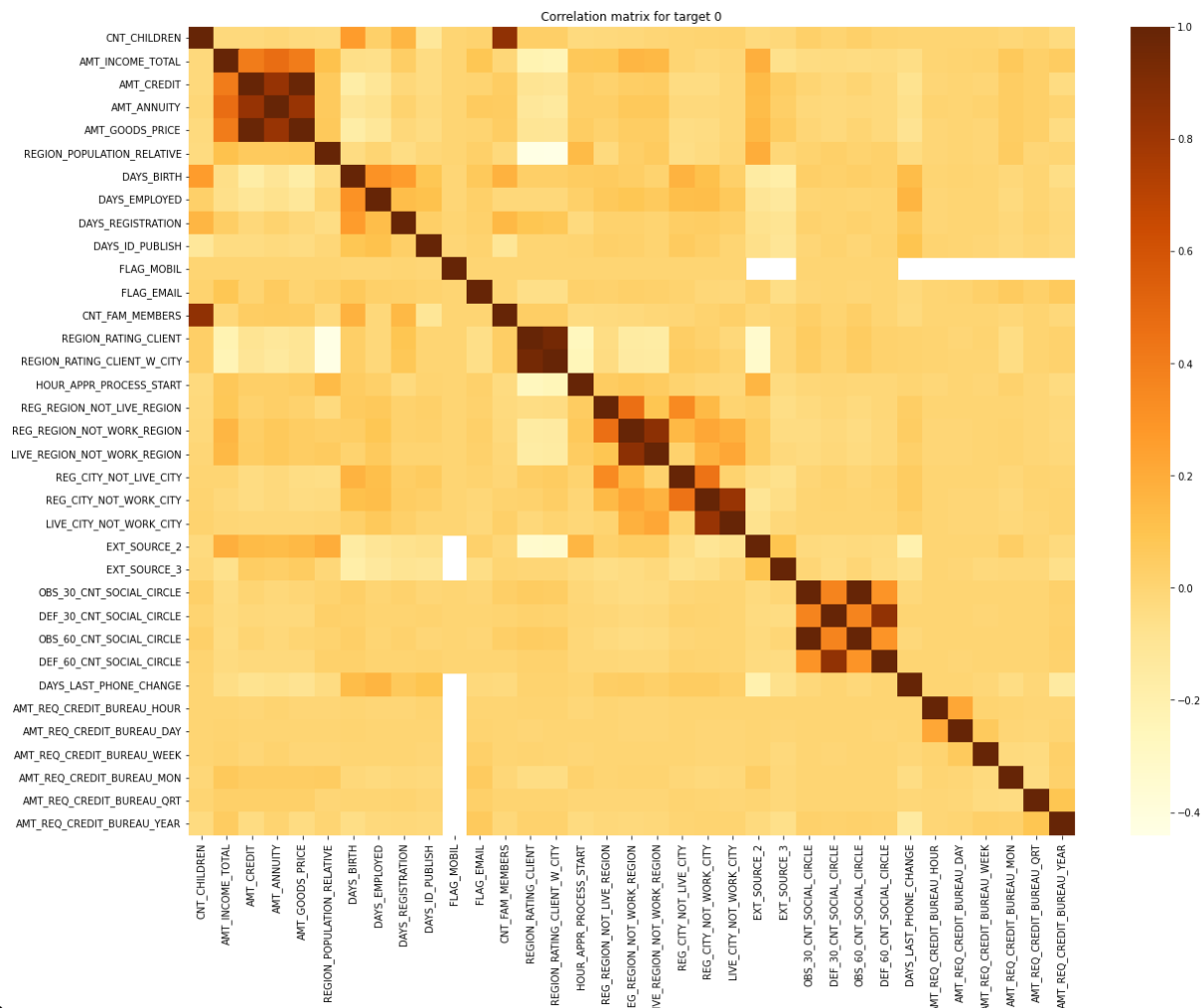

Income type based on Gender of target = 0

Females are much higher than males in both the categories of loan Revolving as we ll as Cash Loans
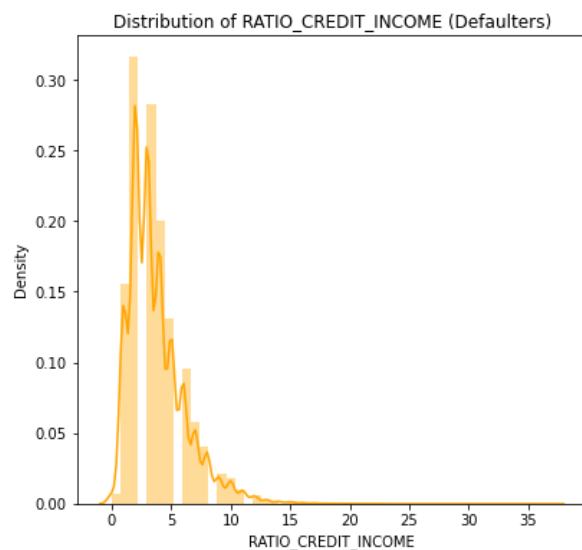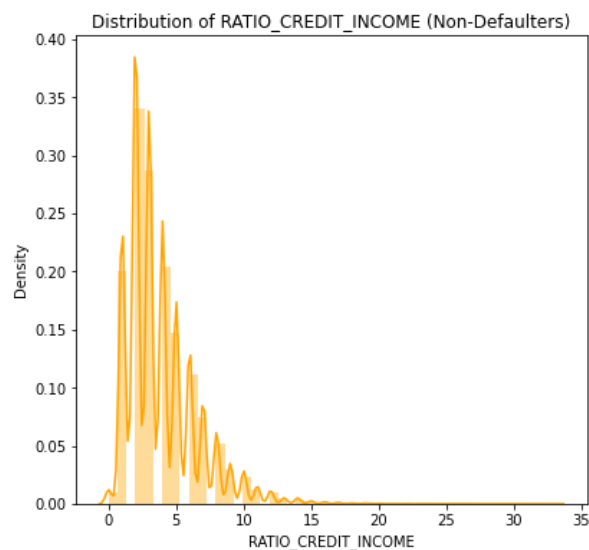
Contract type based on Gender of target = 0
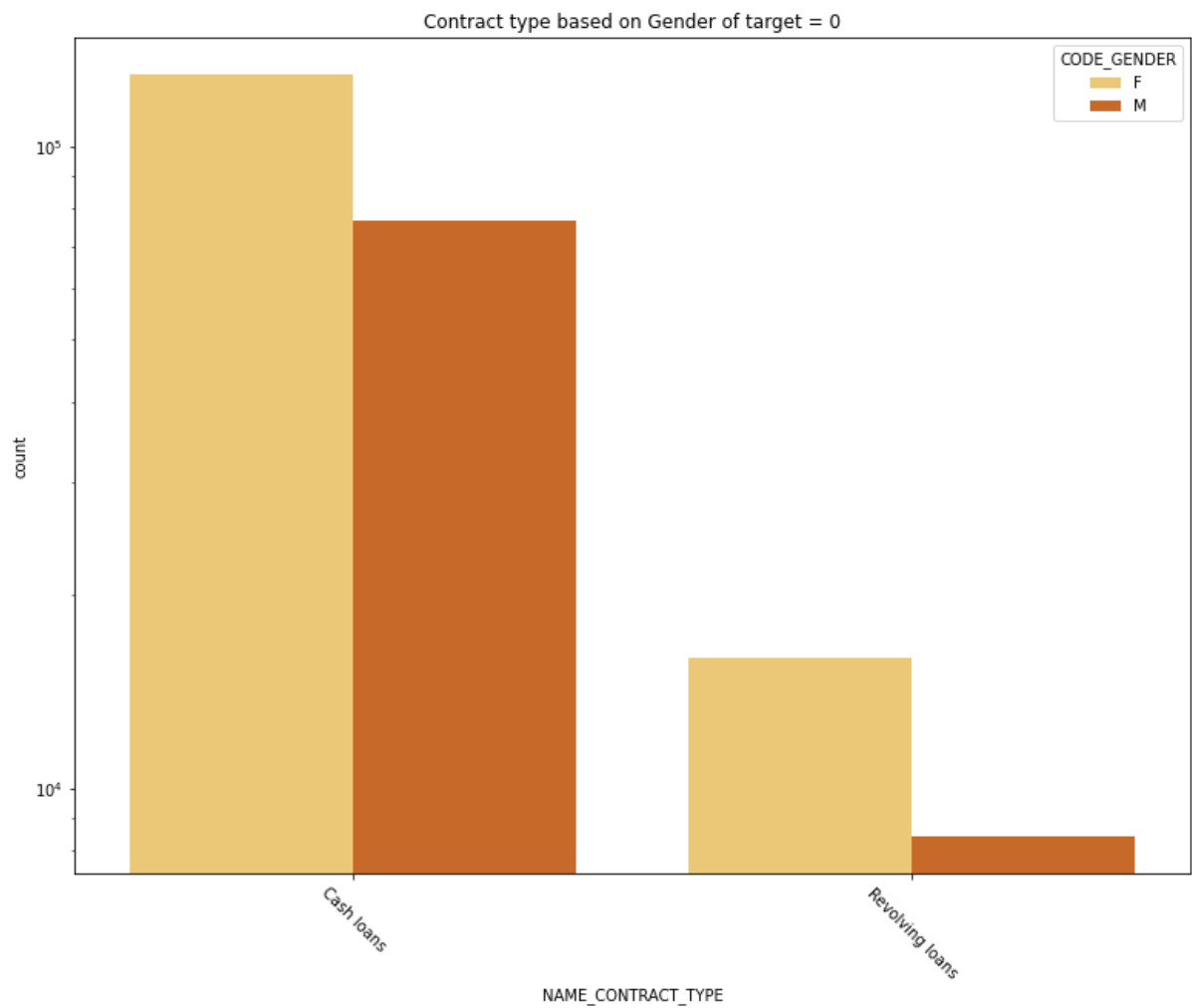
Business entity Type 3 , Self employed, Medicine and Government are among the top categories from which the applications are coming

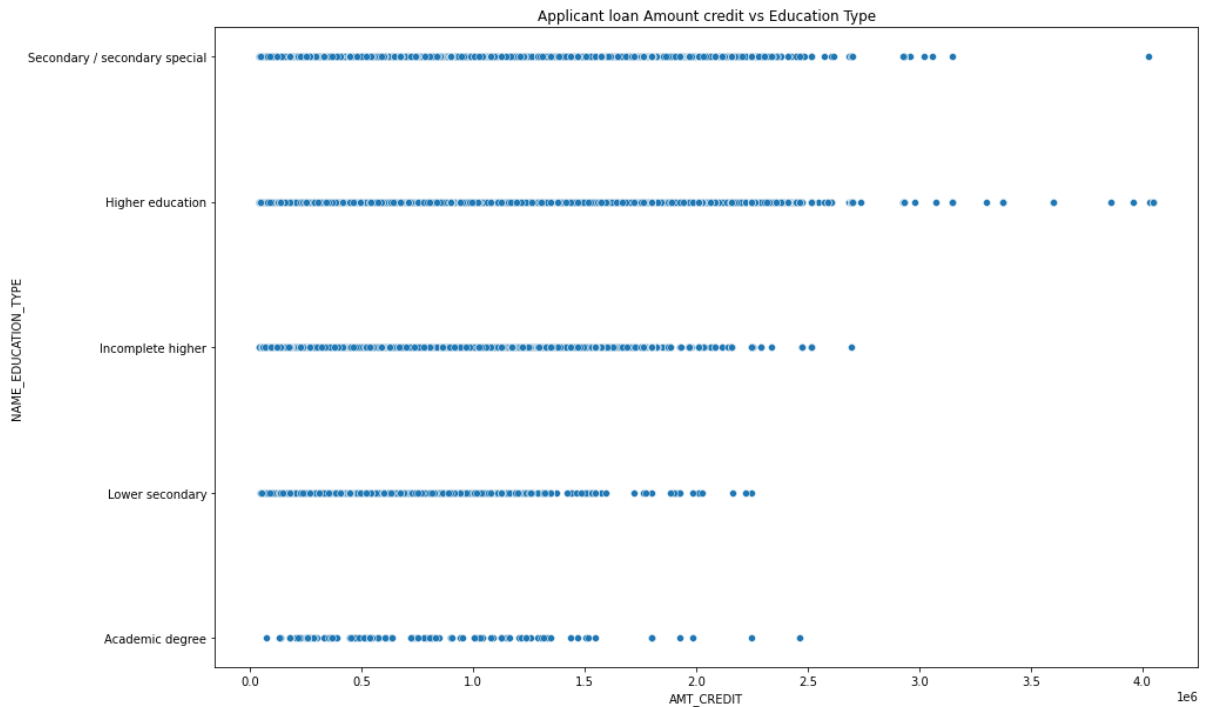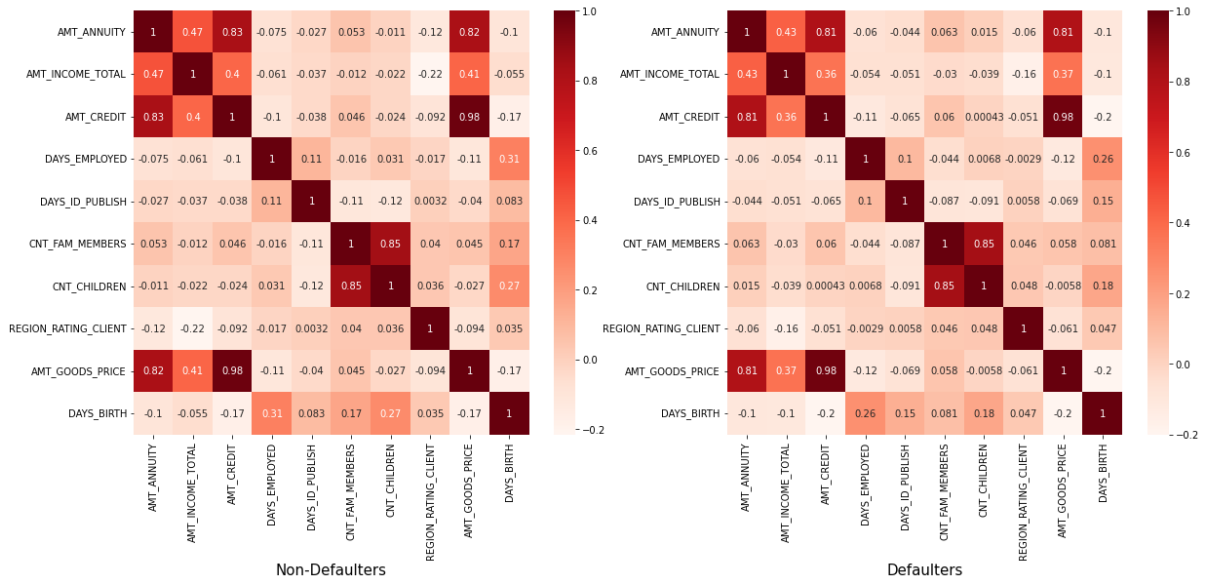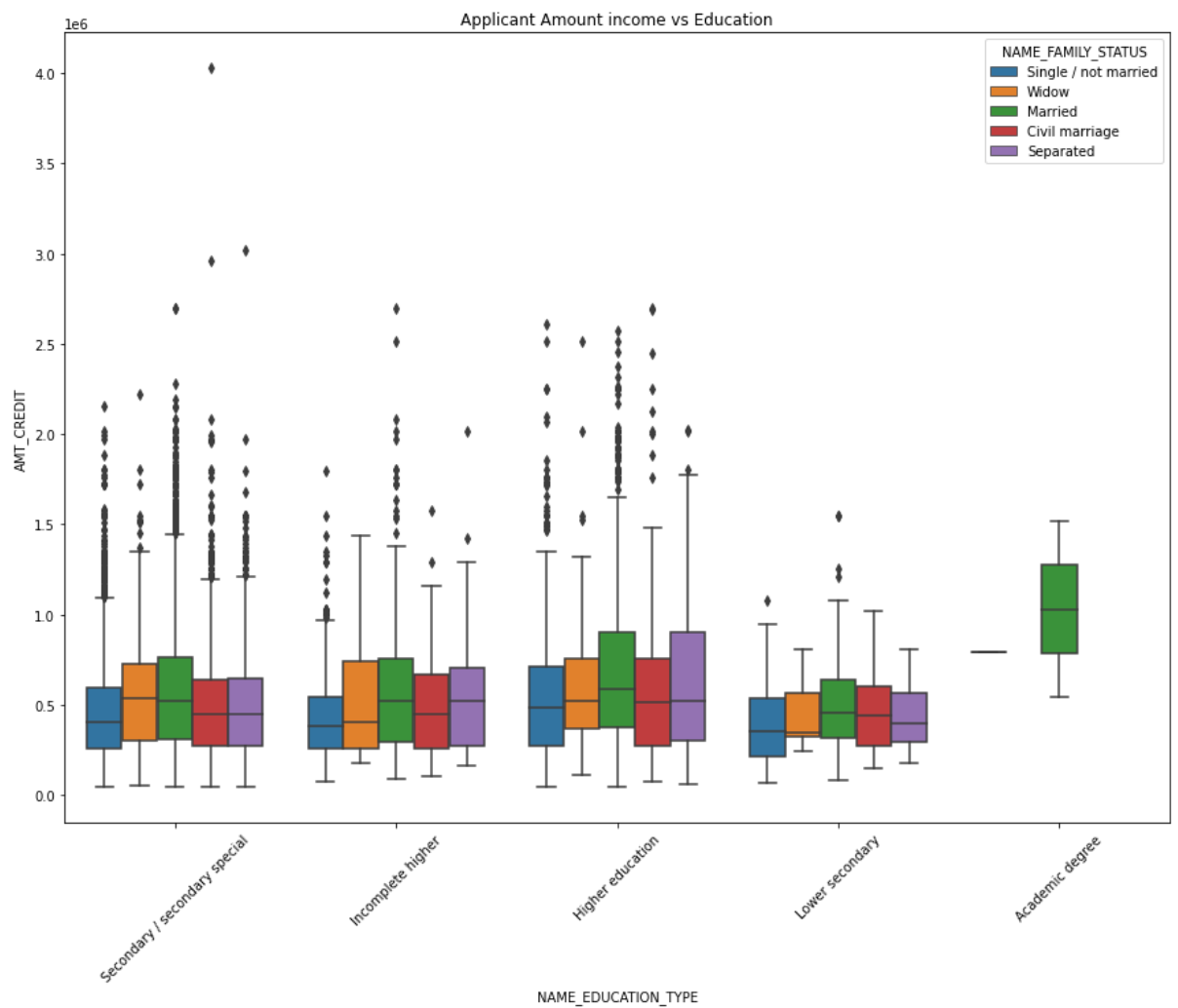Industry: type8, Trade: type5 are among the least to apply for loans

Distribution on the basis of Organization type for Target = 0

Correlation matrix for target 0

Here

Distribution of RATIO_CREDIT_INCOME (Non-Defaulters)
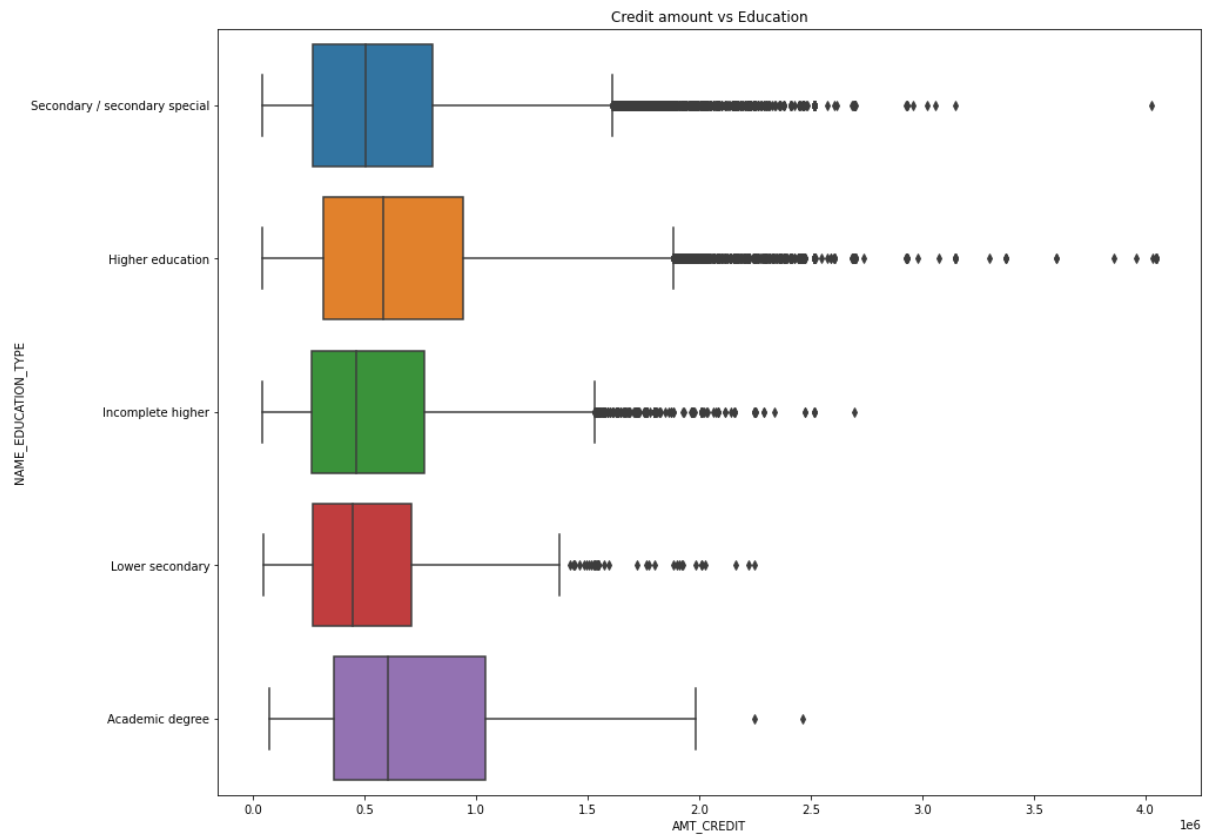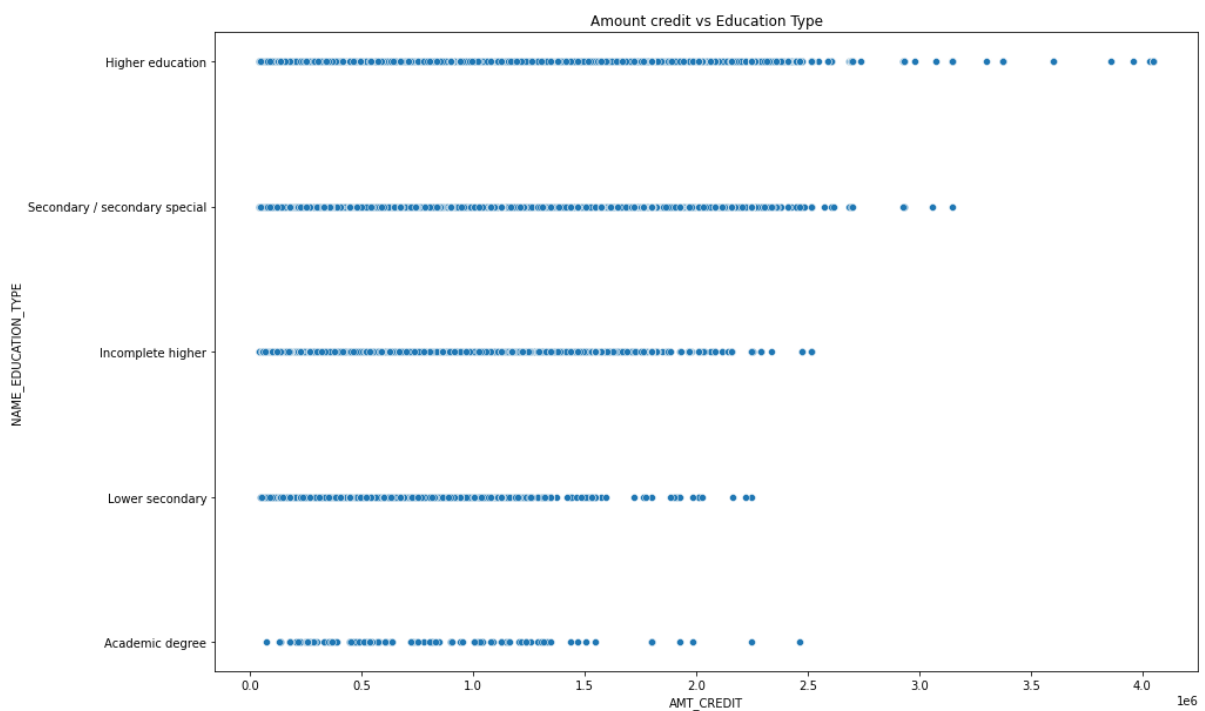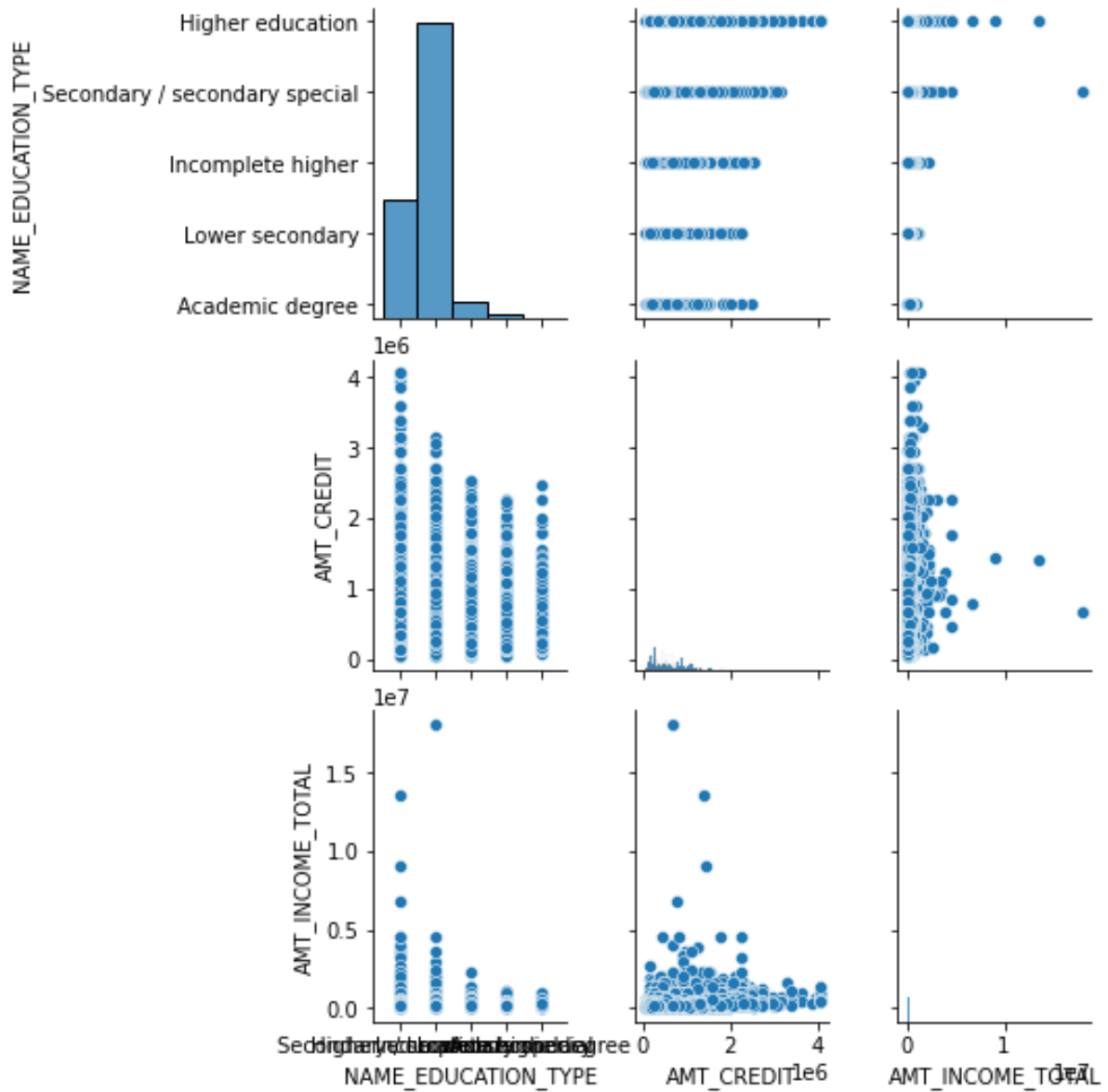

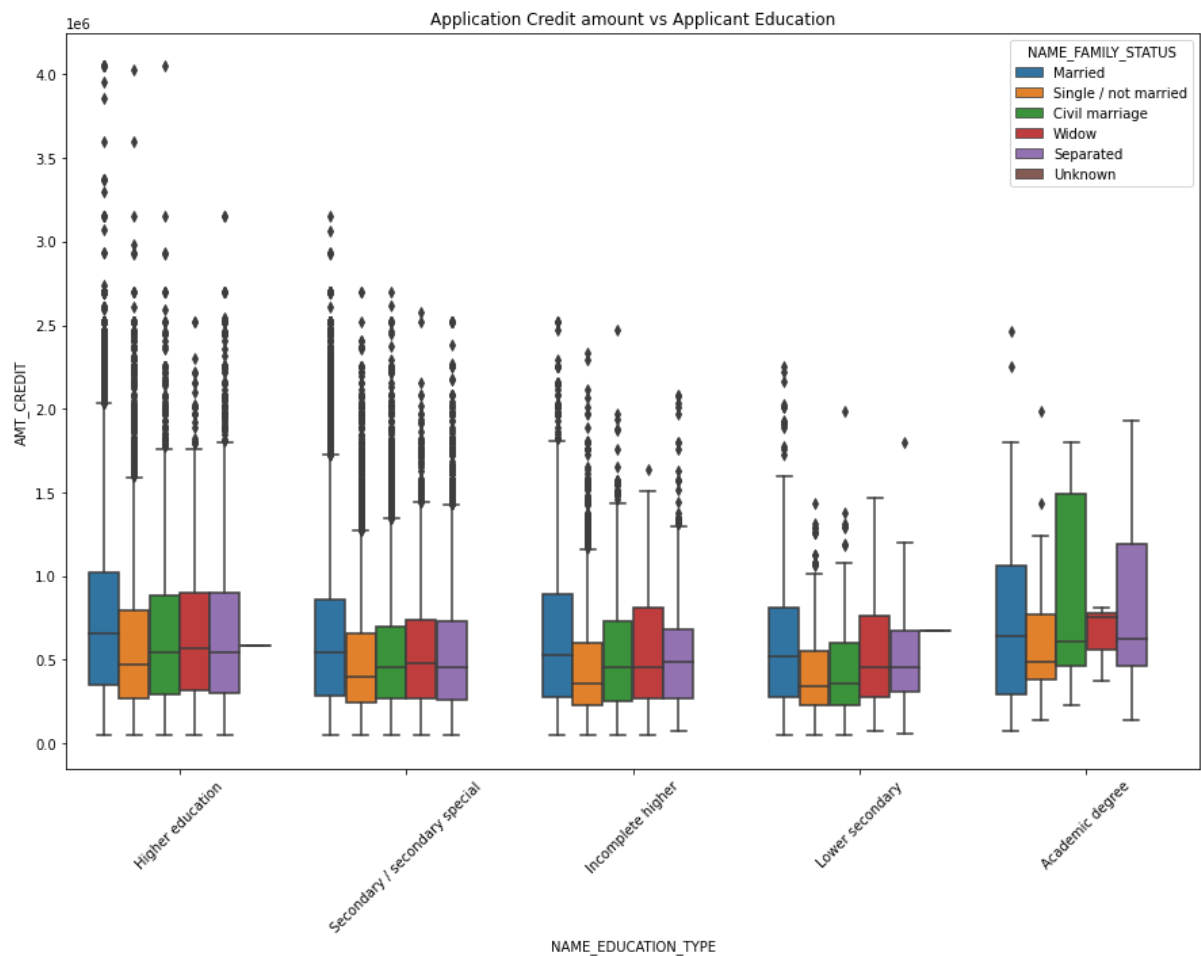Distribution of RATIO_CREDIT_INCOME (Defaulters)

A Heatmap of Correlation between variables

Non-Defaulters

Defaulters

Applicant loan Amount credit vs Education Type

Credit amount vs Education

Applicant Amount income vs Education

Amount credit vs Education Type
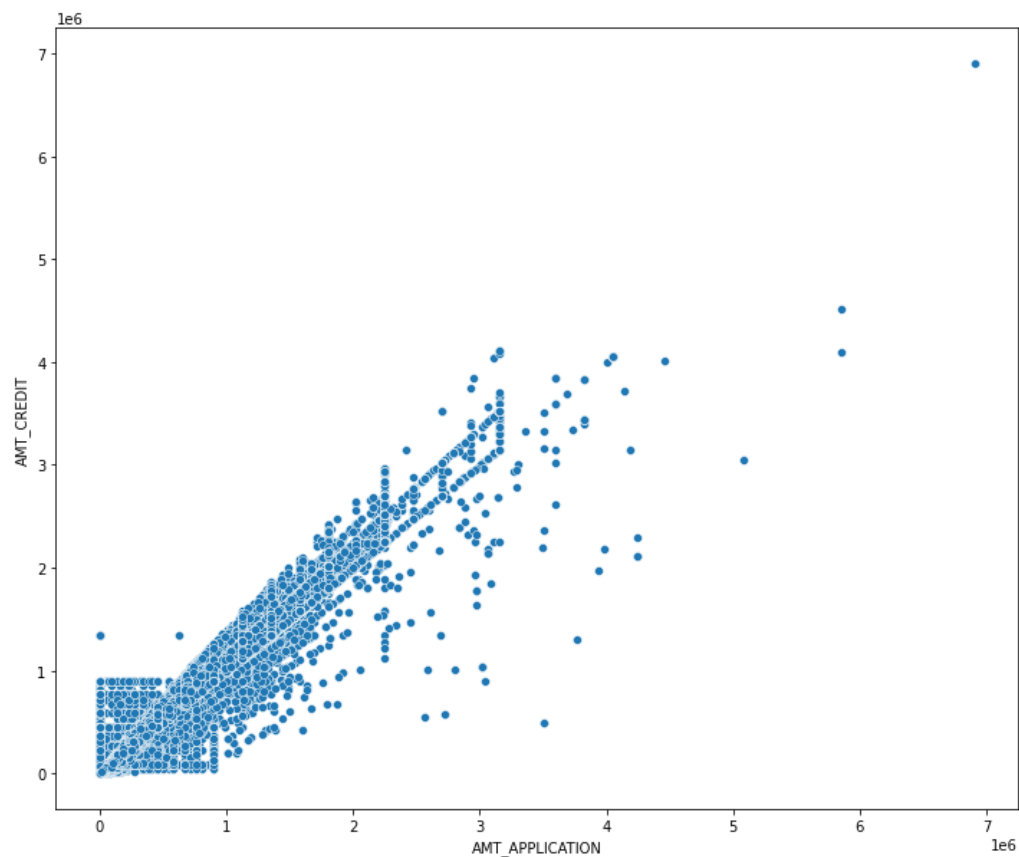
Application Credit amount vs Applicant Education

Plotting the scatter plot for the correlation between columns AMT_APPLICATION and AMT_CREDIT

Distribution of the data based on the purpose and TRAGET

Prev Credit amount vs Loan Purpose

Distribution between Previous credit amount and Housing type for TARGET
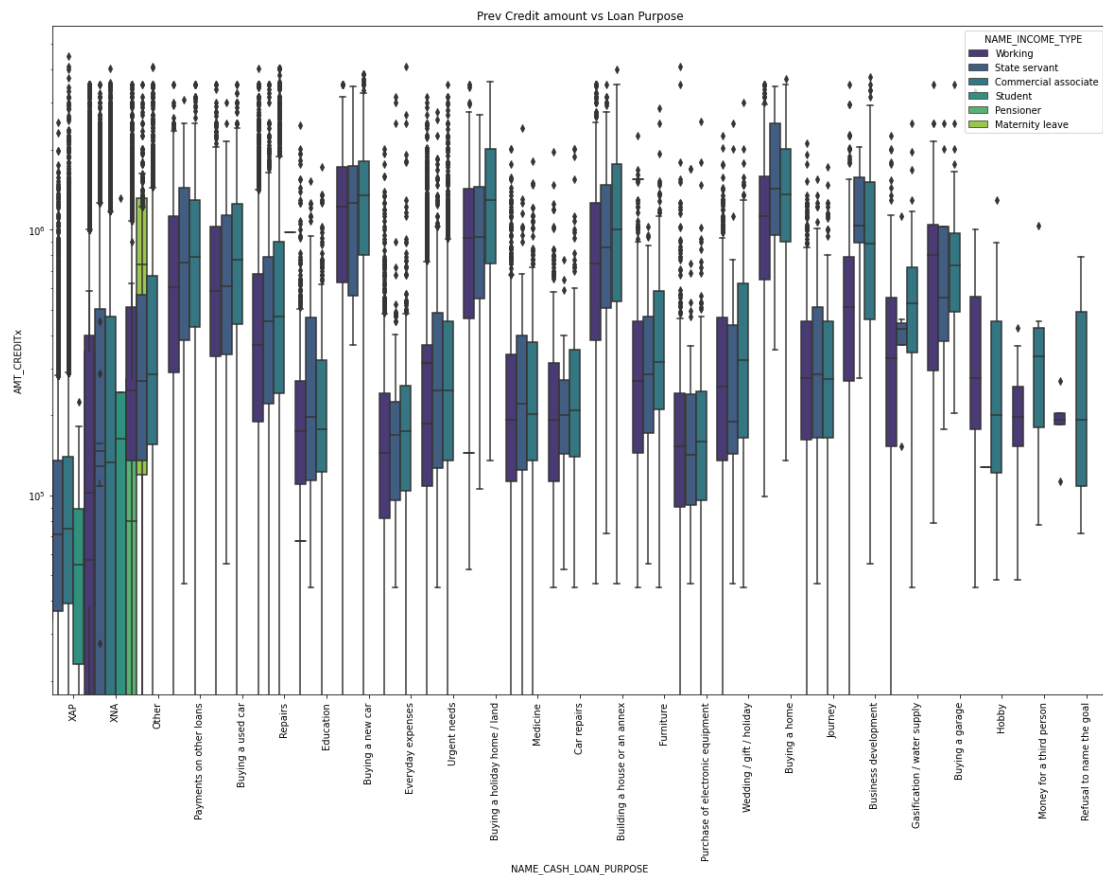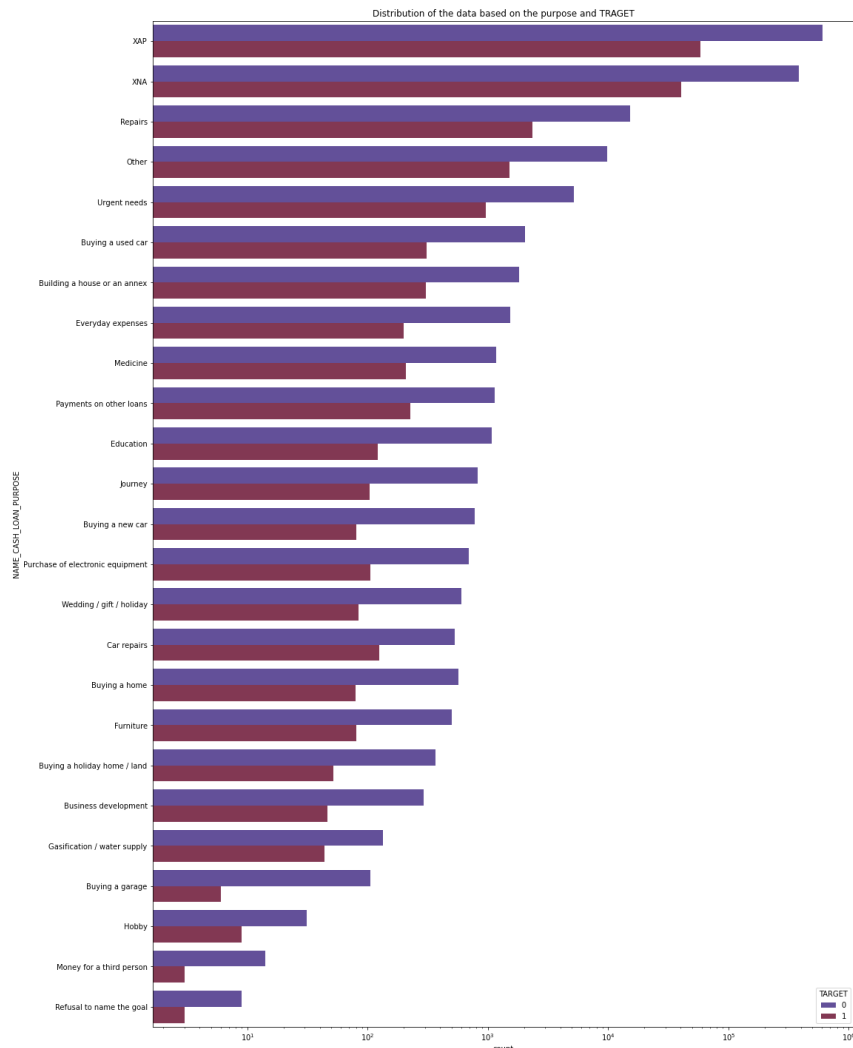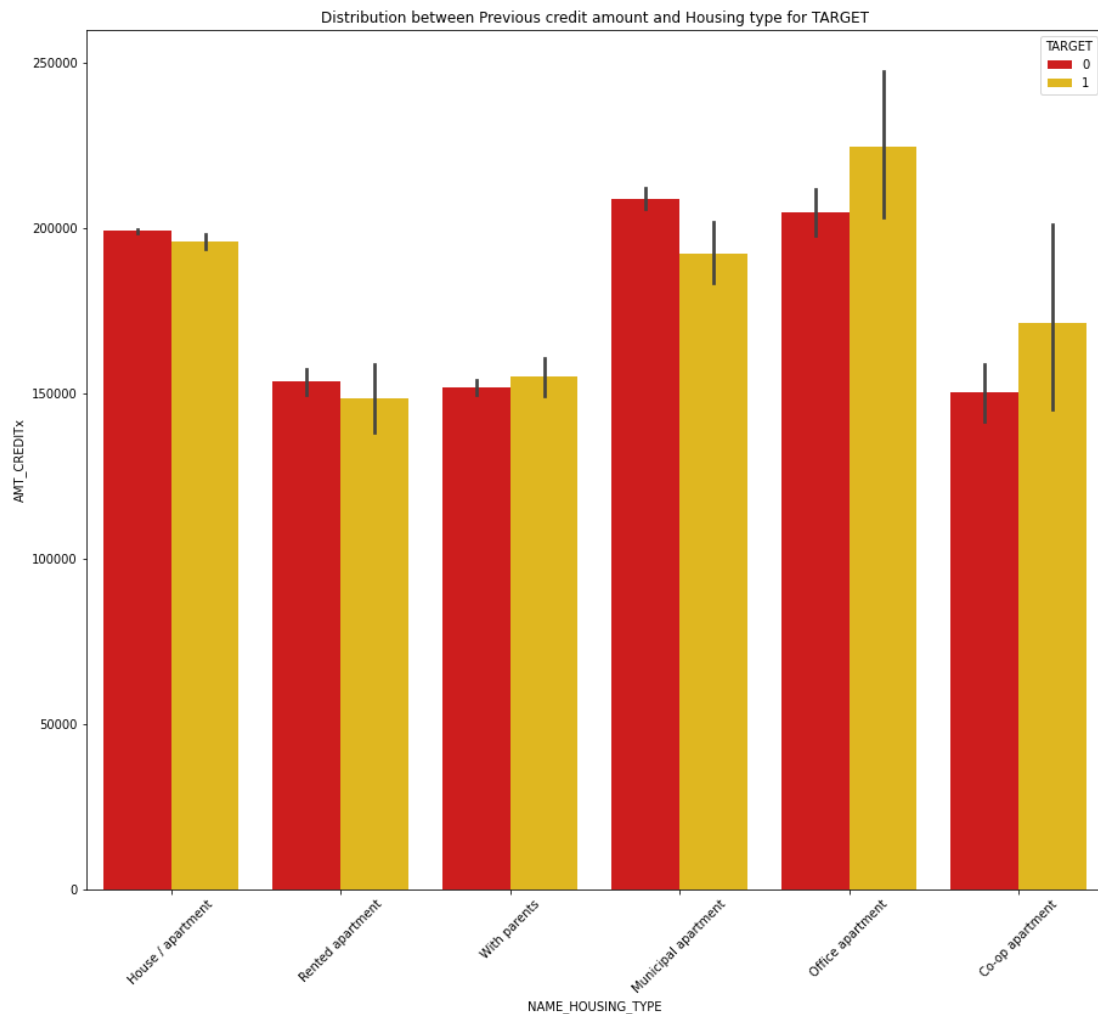
Conclusion

- The bank should focus or target providing loan to below categories of people,
    - The people who are working are less likely to default their loan so they should be considered for the loan
    - Provide loans to people who are married
    - Applicants who are repeaters should be preferred for the loan
    - Applicants who have academic degree
- The bank should be cautious of granting loans to the applicants under below categories,
    - People who are unemployed are less likely to payback loan or high chances of default
    - Applicants who don't own a house are very likely to default a loan
    - Age group between 25 to 35 years
    - Job roles such as Salesman, Drivers and Labourers