

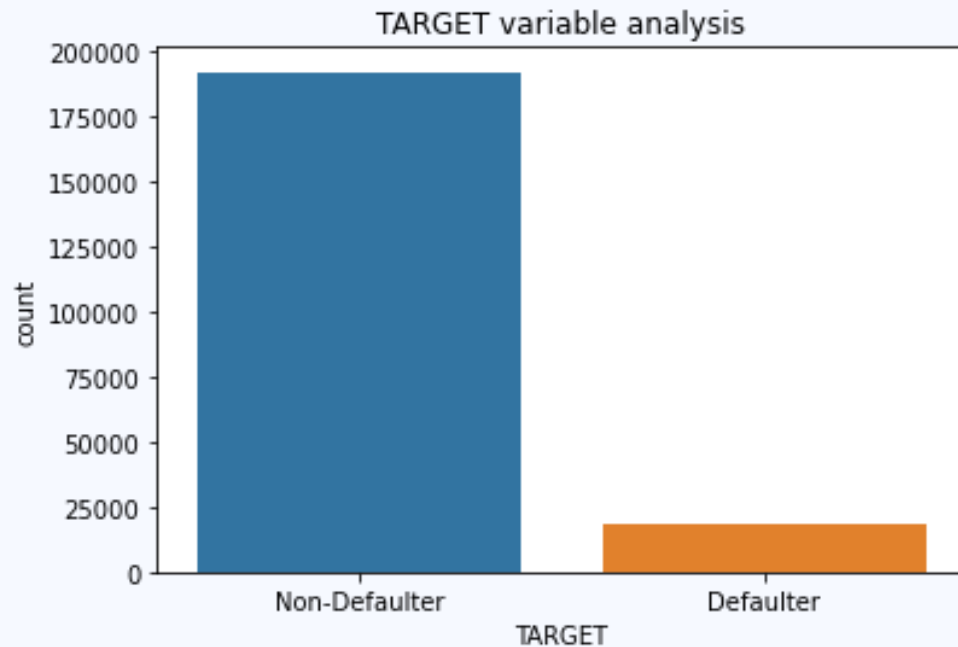
RISK ANALYSIS

CREDIT EDA ASSIGNMENT

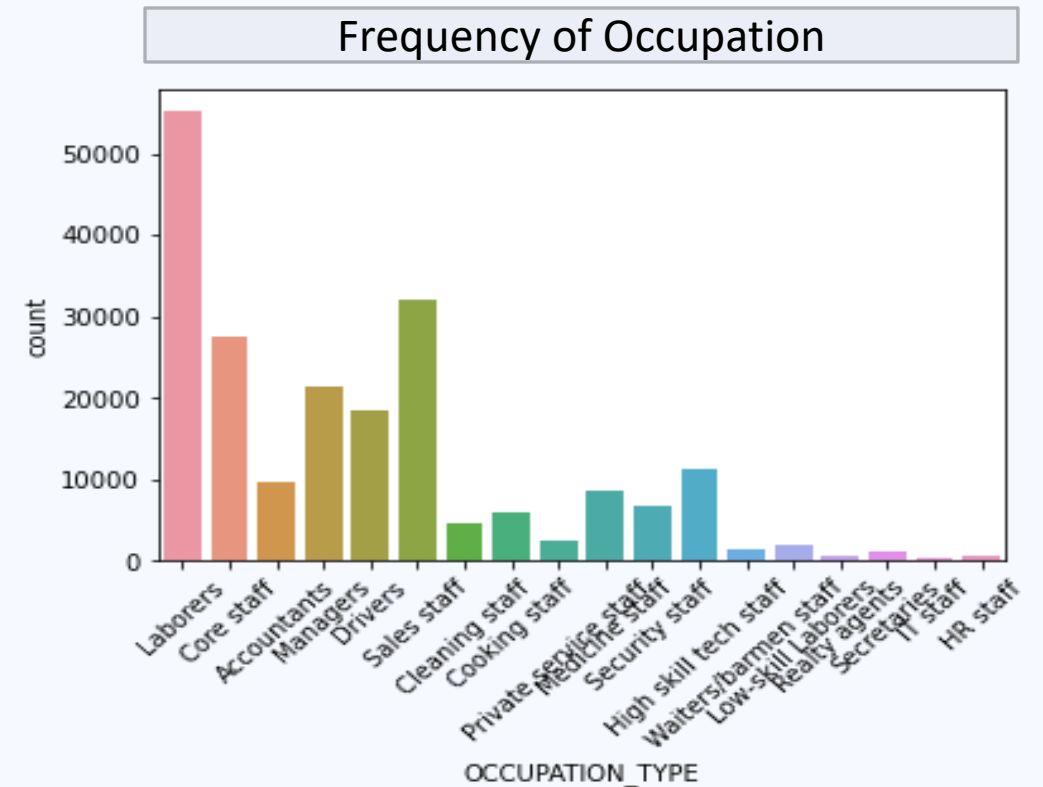
OBJECTIVE

1. This case study aims to identify patterns which indicate if a client has difficulty paying their installments which may be used for taking actions such as denying the loan, reducing the amount of loan, lending (to risky applicants) at a higher interest rate, etc.
2. This will ensure that the consumers capable of repaying the loan are not rejected. Identification of such applicants using EDA is the aim of this case study.
3. The company wants to understand the driving factors (or driver variables) behind loan default, i.e. the variables which are strong indicators of default. The company can utilise this knowledge for its portfolio and risk assessment.

DATA ANALYSIS

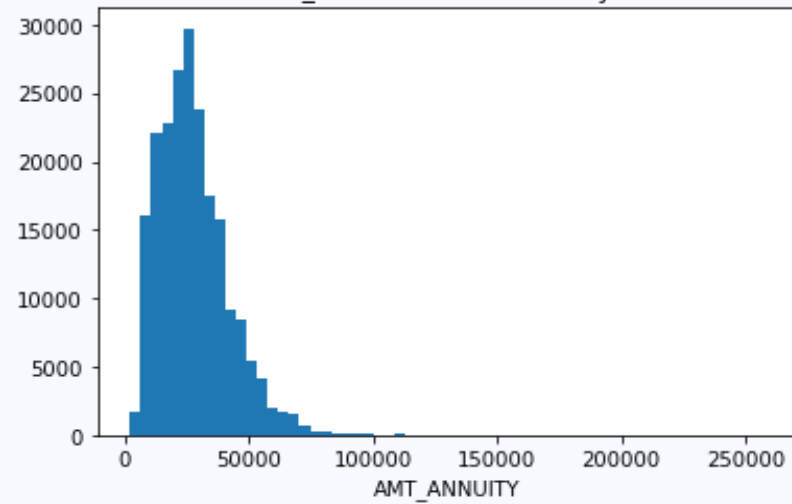


- As evident from the graph, the non-defaulter are significantly higher than the defaulters.
- If we provide loans, we have a higher chances of getting out money back.

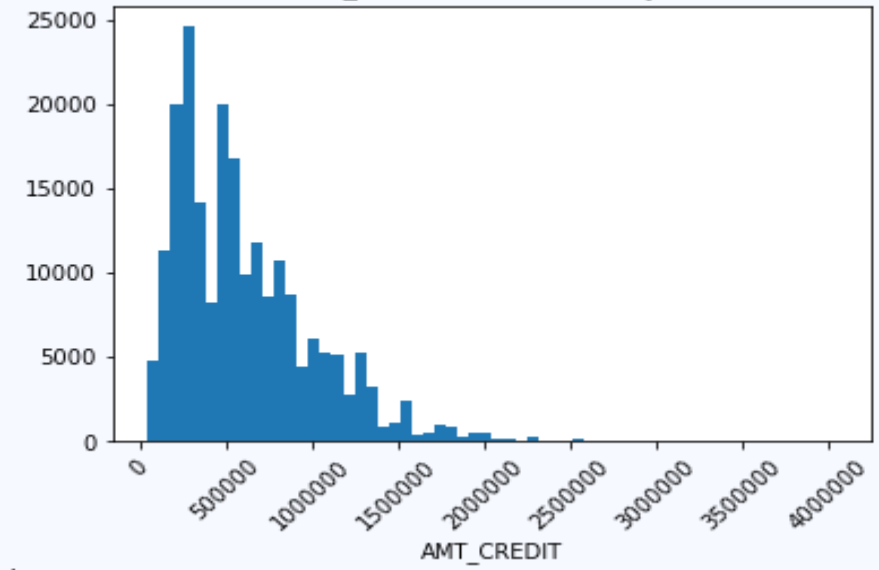


- The highest number of people who apply for loans are laborers.
- HR staff has to lowest number of loans application

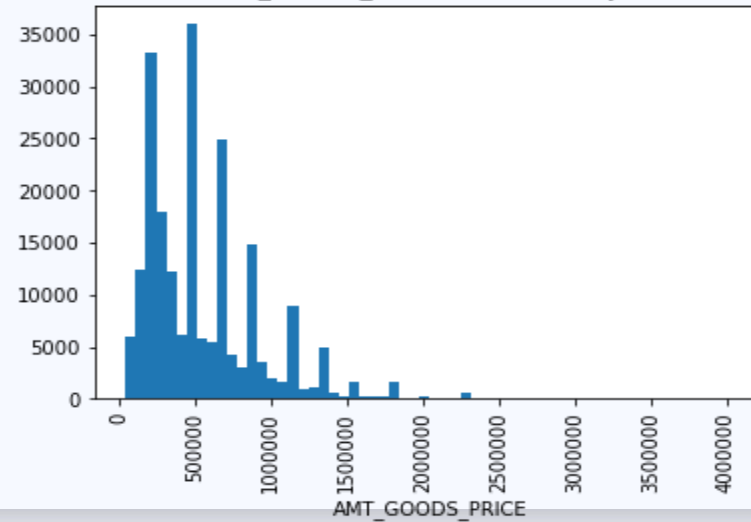
AMT_ANNUIITY variable analysis



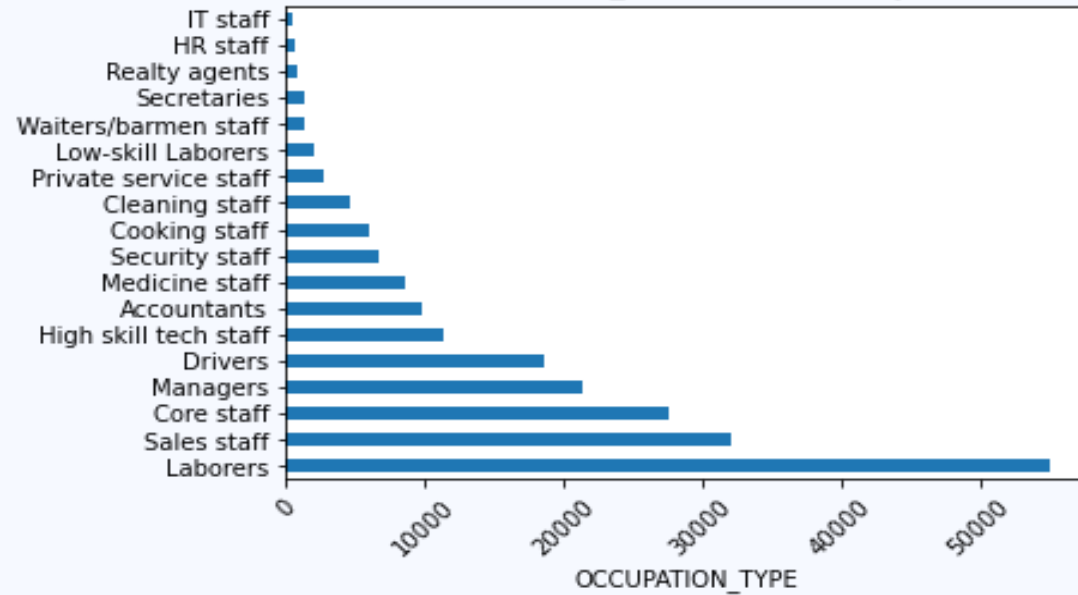
AMT_CREDIT variable analysis



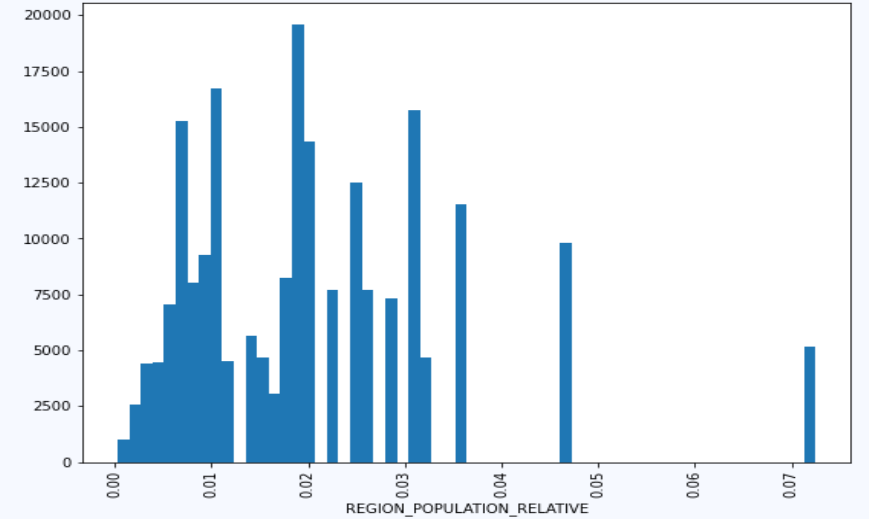
AMT_GOODS_PRICE variable analysis



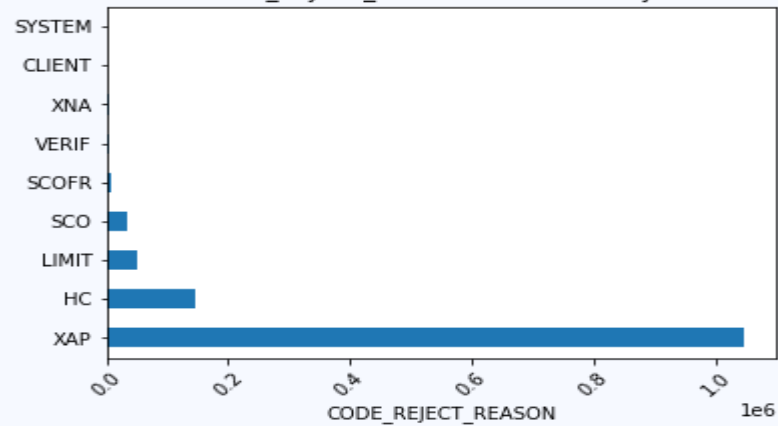
OCCUPATION_TYPE variable analysis



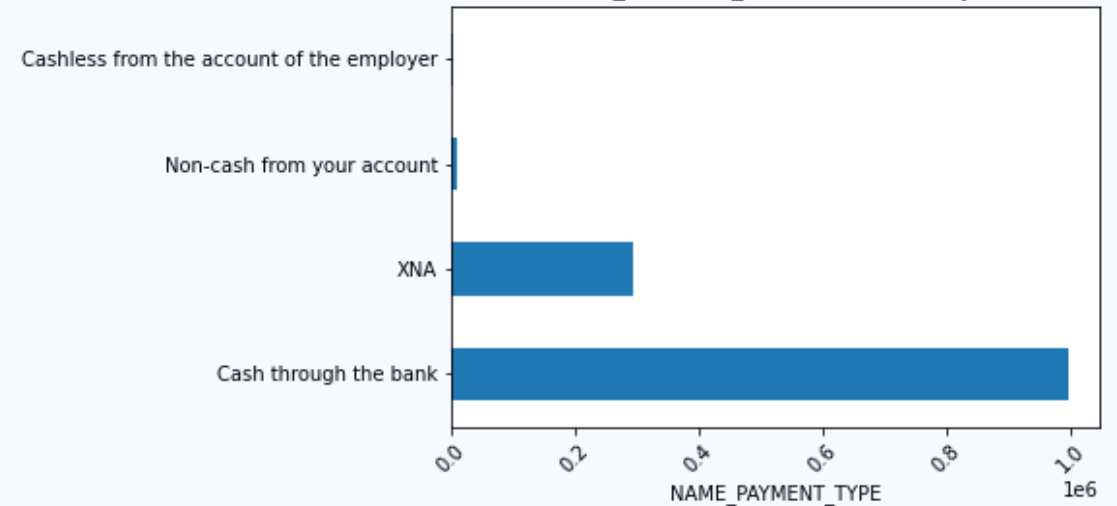
REGION_POPULATION_RELATIVE variable analysis

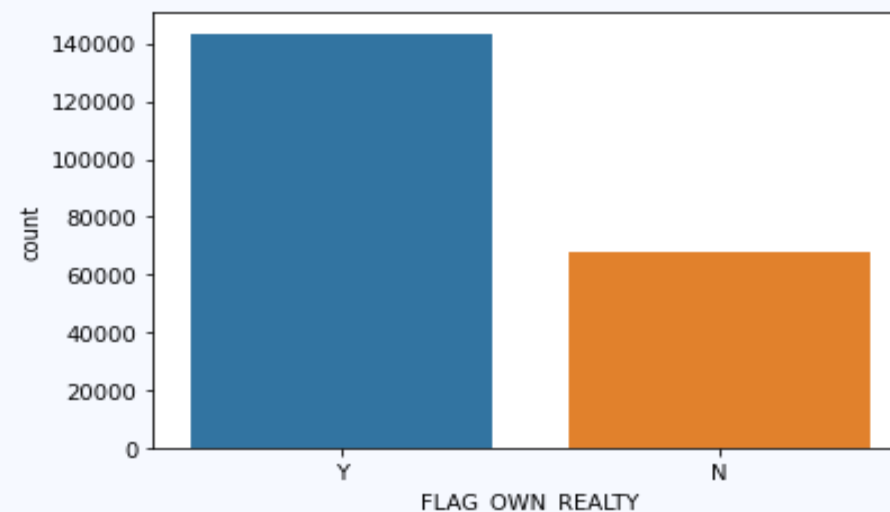
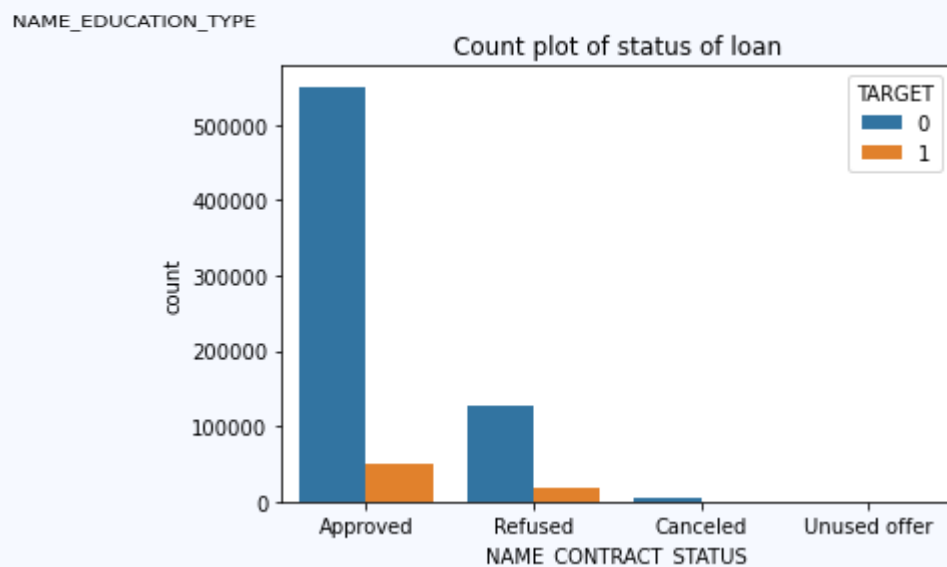
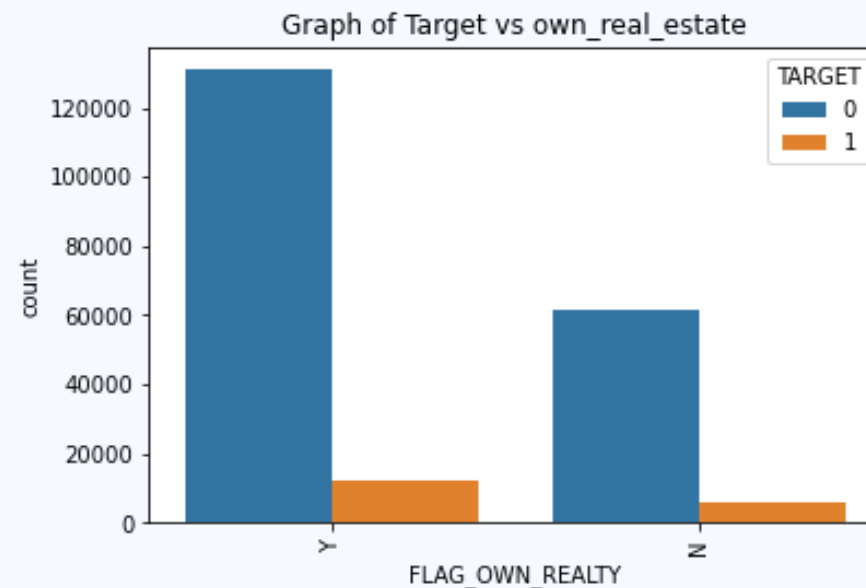
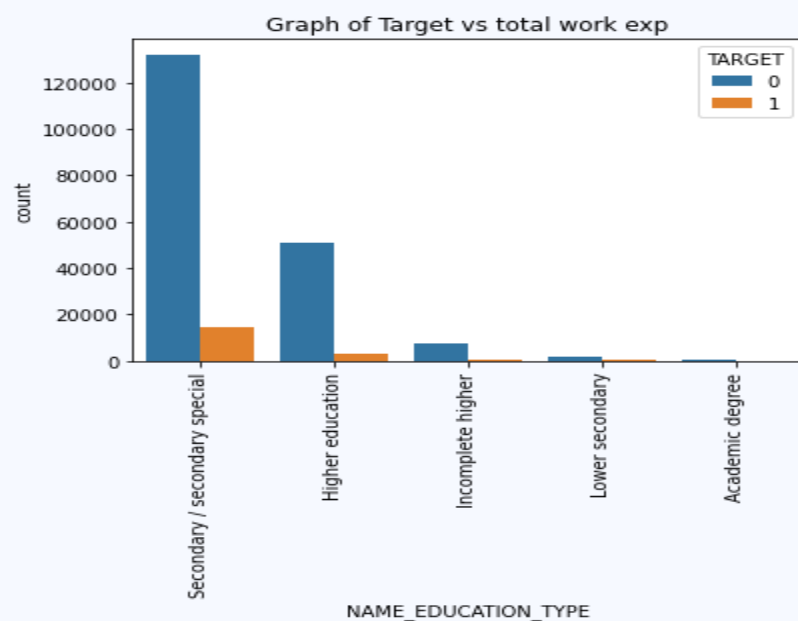


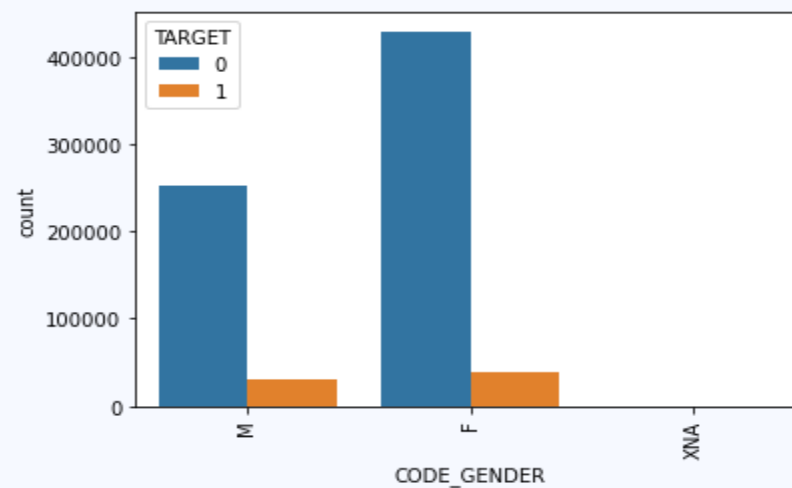
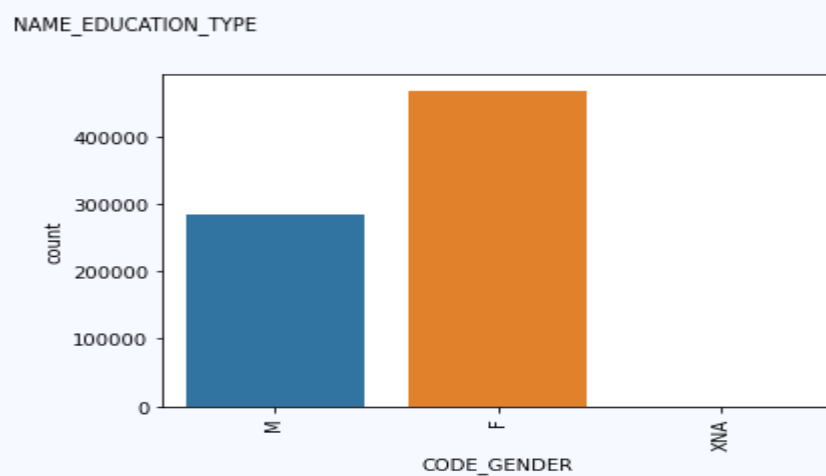
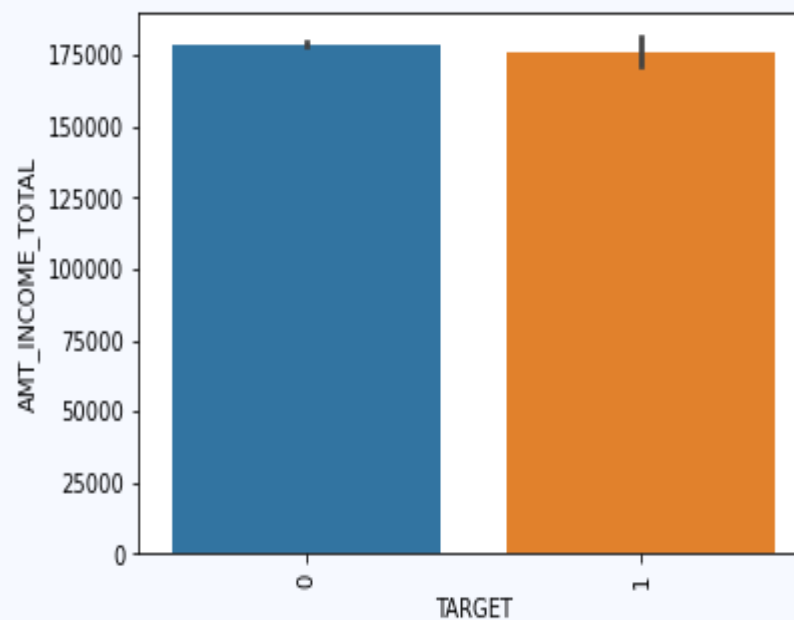
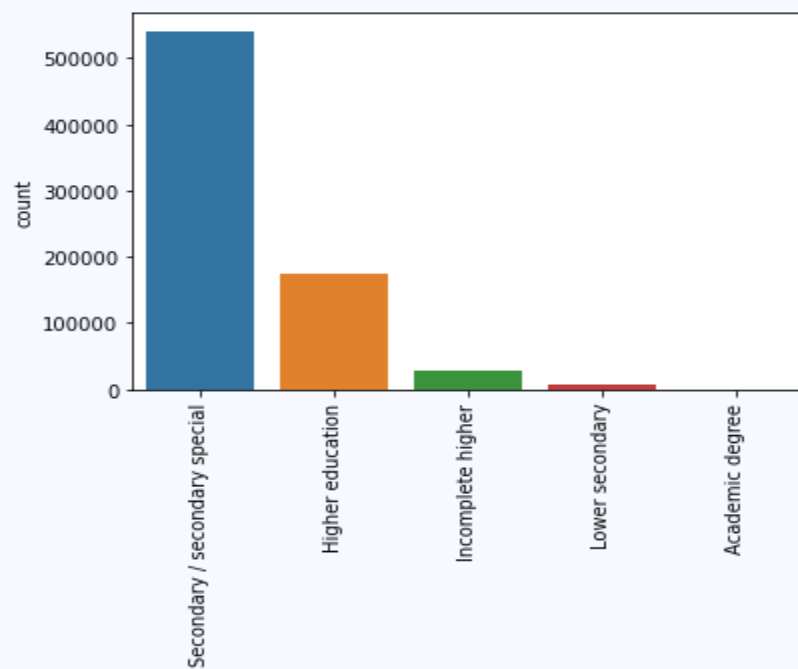
CODE_REJECT_REASON variable analysis

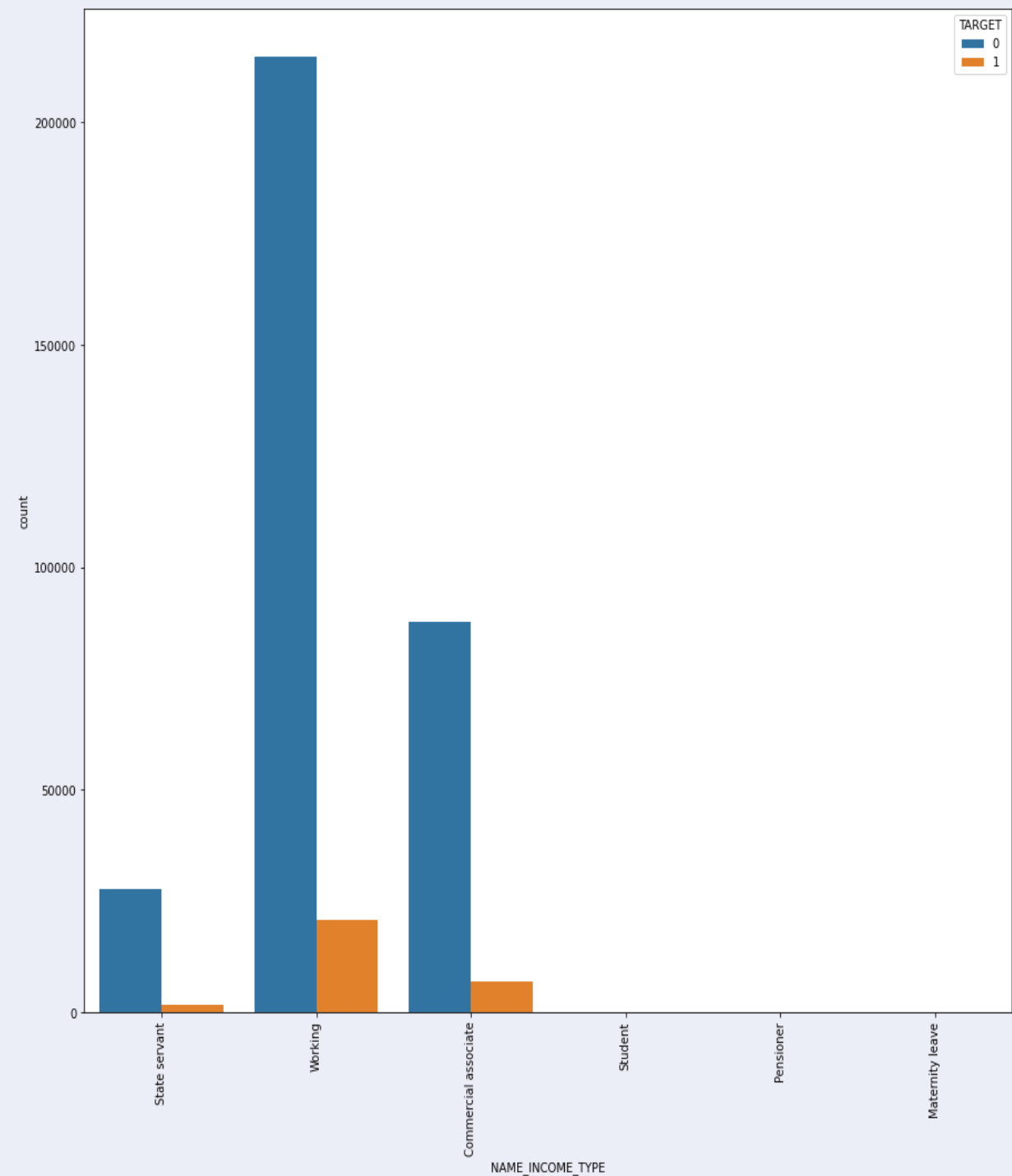
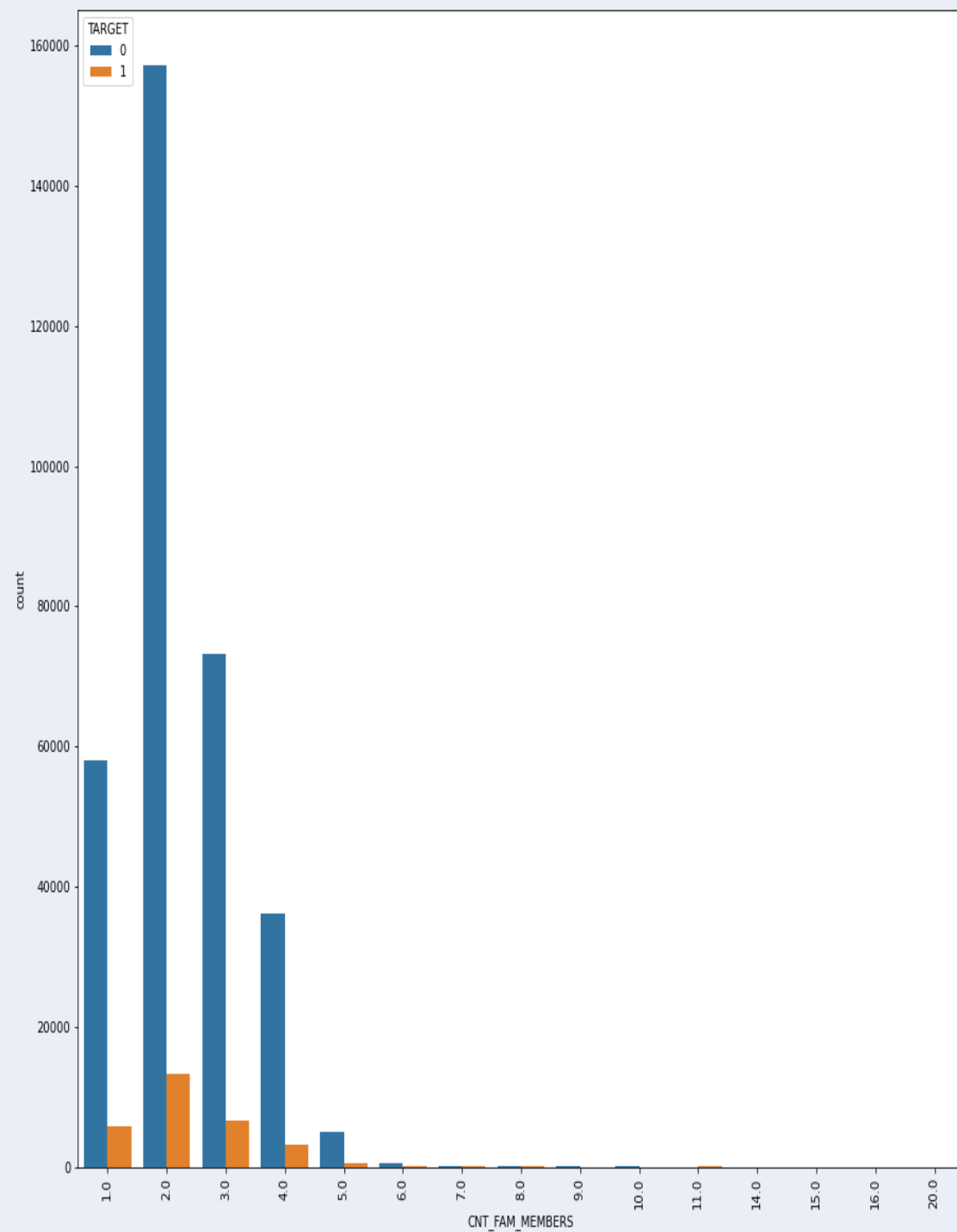


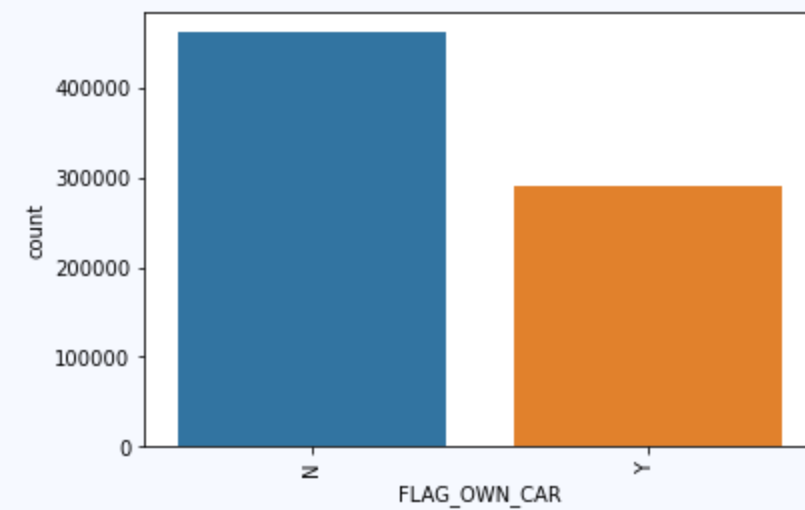
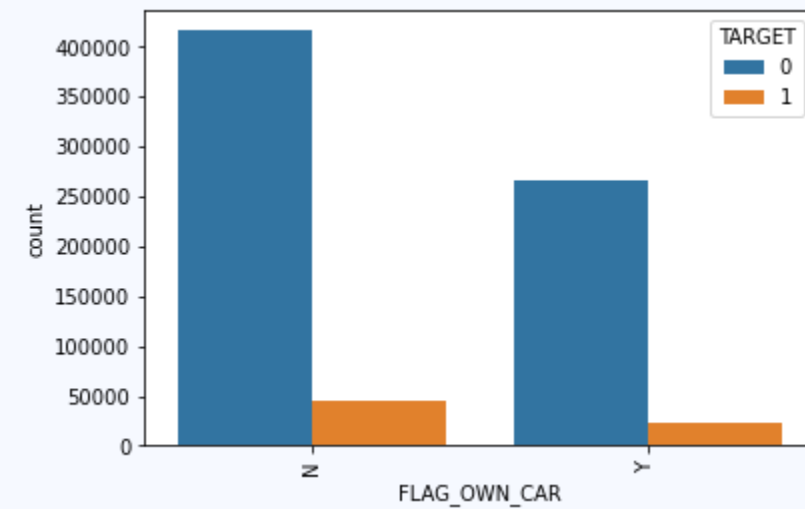
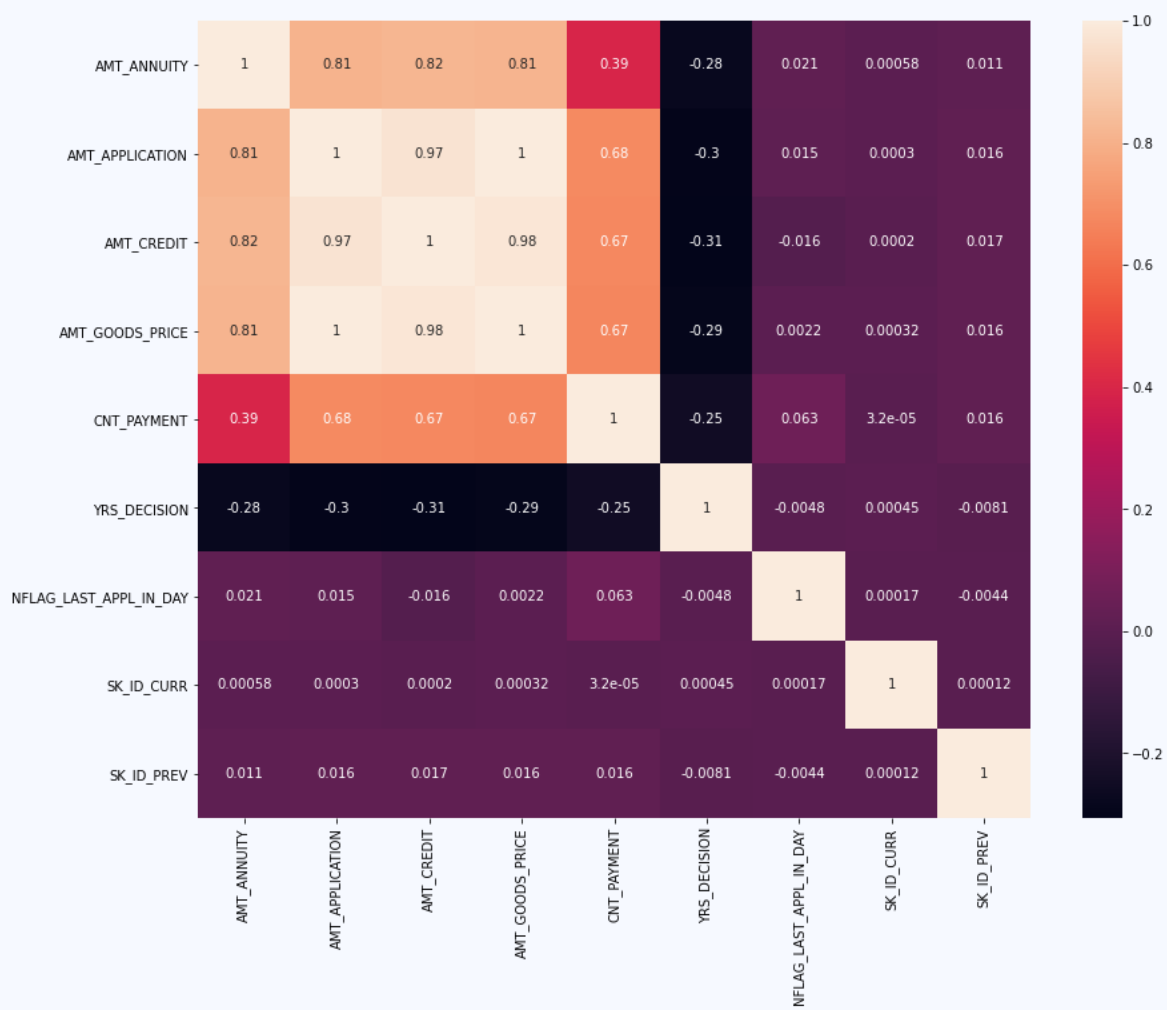
NAME_PAYMENT_TYPE variable analysis

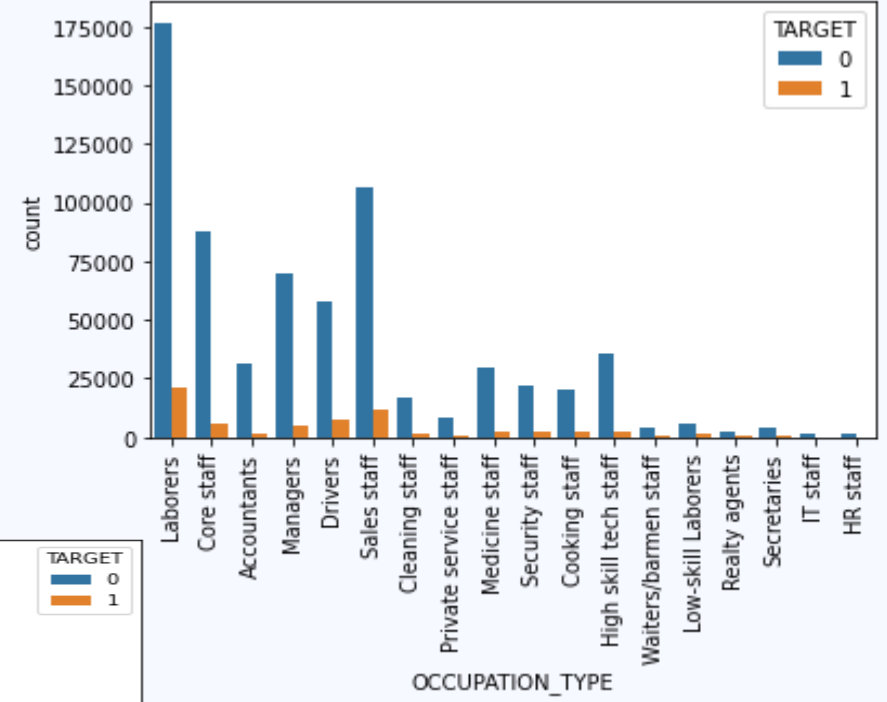
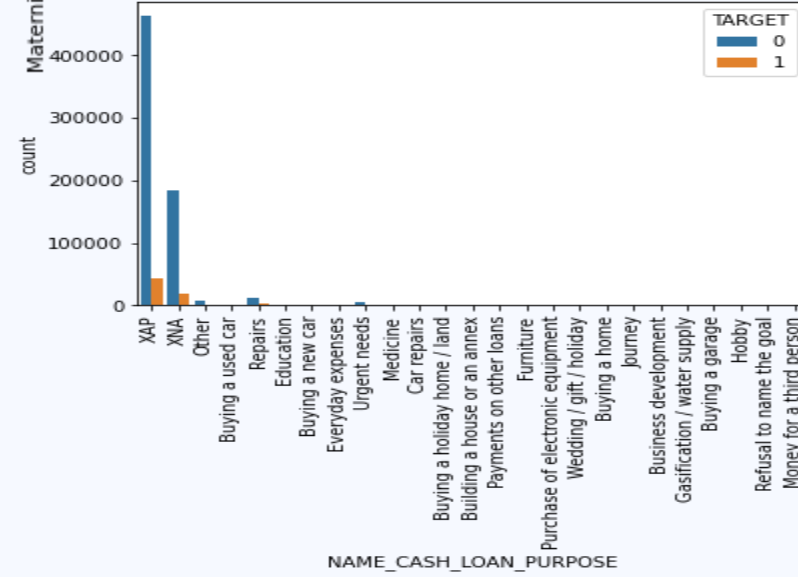
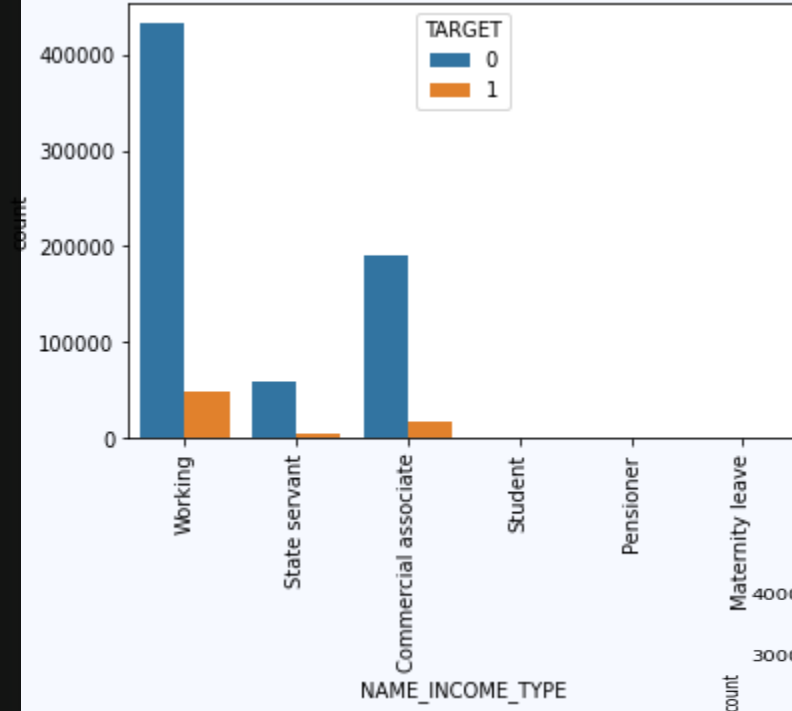


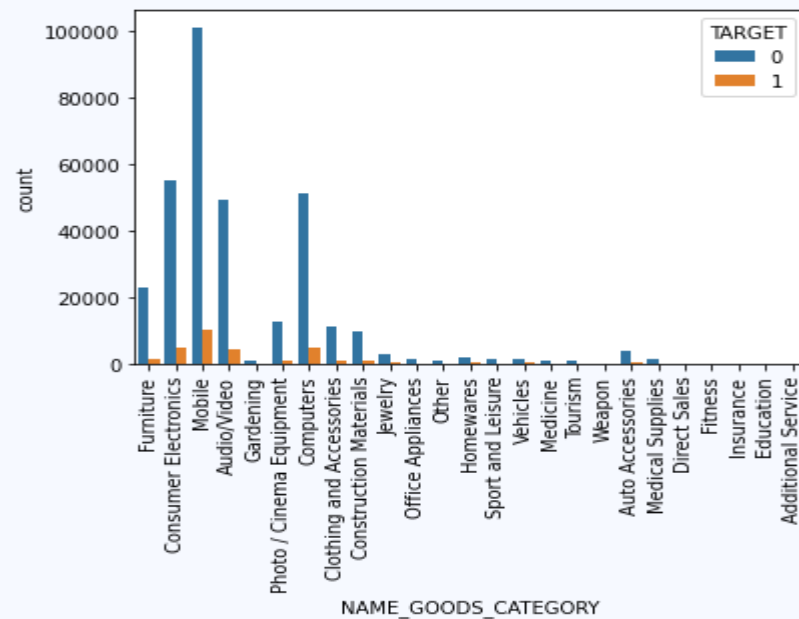
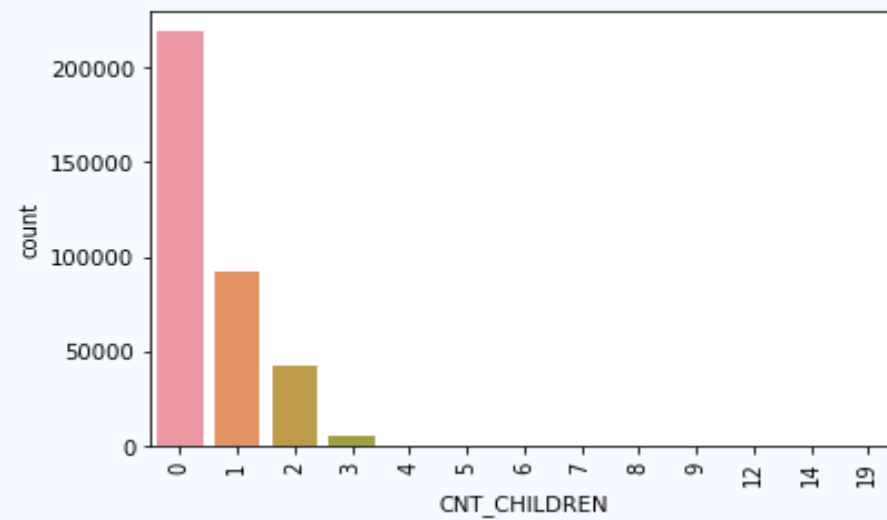
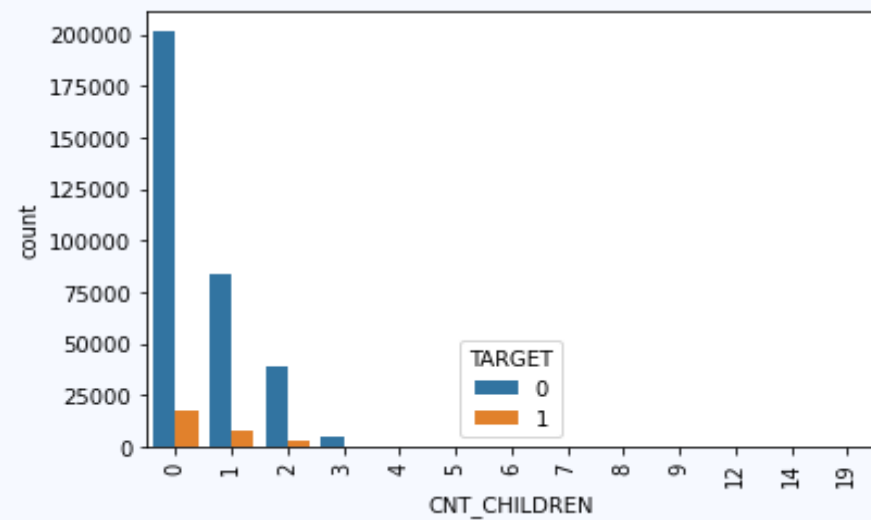












CONCLUSION OF THE ANALYSIS:

Decisive Factor whether an applicant will be a NON-DEFAULTER

- NAME_EDUCATION_TYPE: Academic degree has less defaults.
- ORGANIZATION_TYPE: Clients with Trade Type 4 and 5 and Industry type 8 etc have repayed the loans.
- DAYS_EMPLOYED: Clients with 40+ year experience having less than 1% default rate.
- AMT_INCOME_TOTAL: Applicant with higher income repay loans.
- CNT_CHILDREN: People with zero to two children repay loans.
- NAME_INCOME_TYPE: Student and Businessmen repay loans.
- CNT_FAM_MEMBERS: People with less family members default less

Decisive Factor whether an applicant will be DEFaulter

- **CODE_GENDER:** Men default more as compared to women
- **NAME_FAMILY_STATUS :** People who have civil marriage or who are single default a lot.
- **NAME_EDUCATION_TYPE:** People with Lower Secondary & Secondary education default more.
- **NAME_INCOME_TYPE:** Clients who are working, commercial associate default a lot.
- **OCCUPATION_TYPE:** Low-skill Laborers, Drivers and Waiters/barmen staff, Security staff, Laborers and Cooking staff default.
- **ORGANIZATION_TYPE:** Self-employed people have relative high defaulting rate
- **CNT_CHILDREN & CNT_FAM_MEMBERS:** people with relatively more no of family members & children default more.
- **AMT_GOODS_PRICE:** When the credit amount rises, default rate rises.