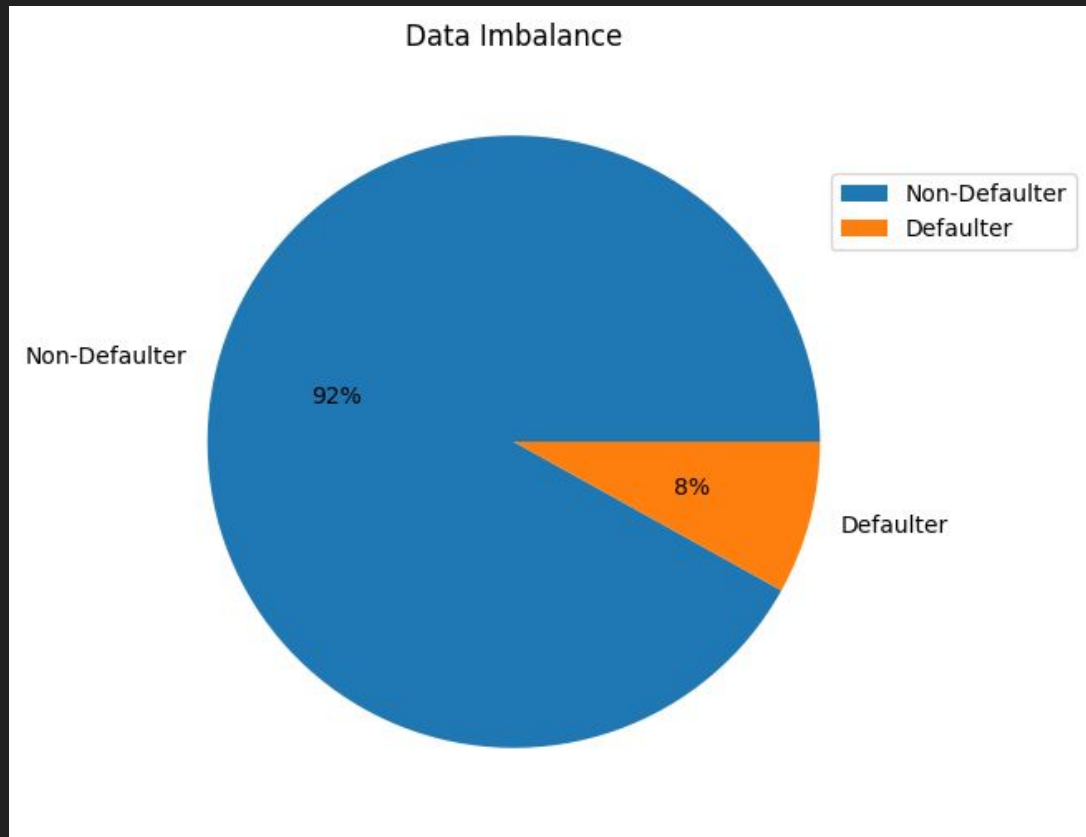


EDA Assignment

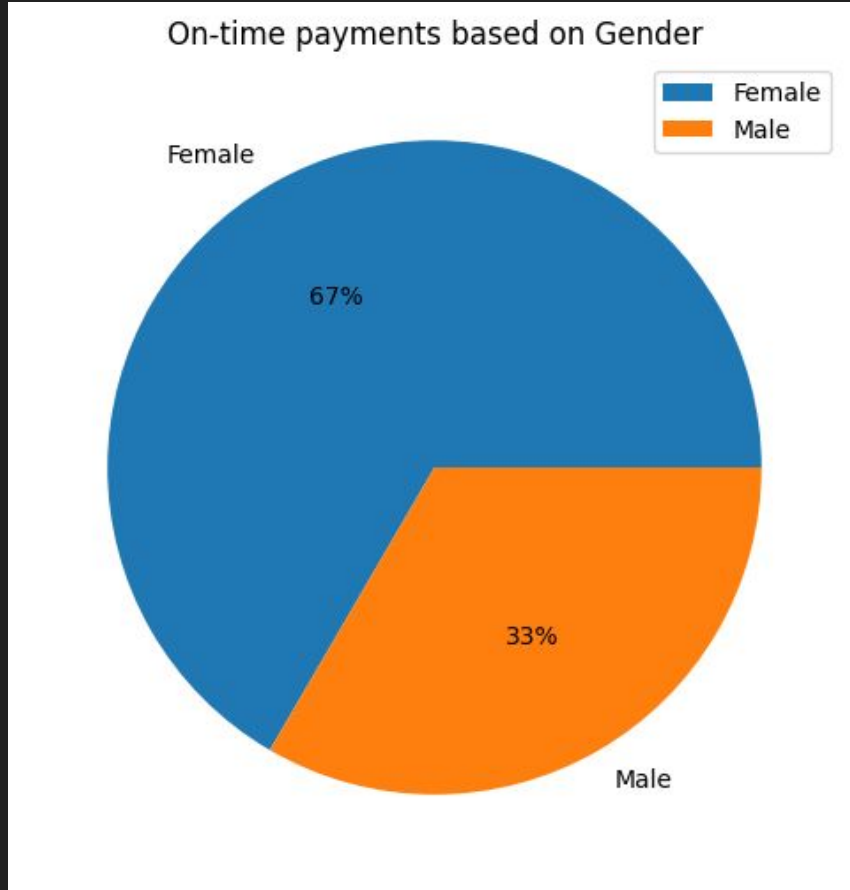
By Shubham Kumar

DATA IMBALANCE



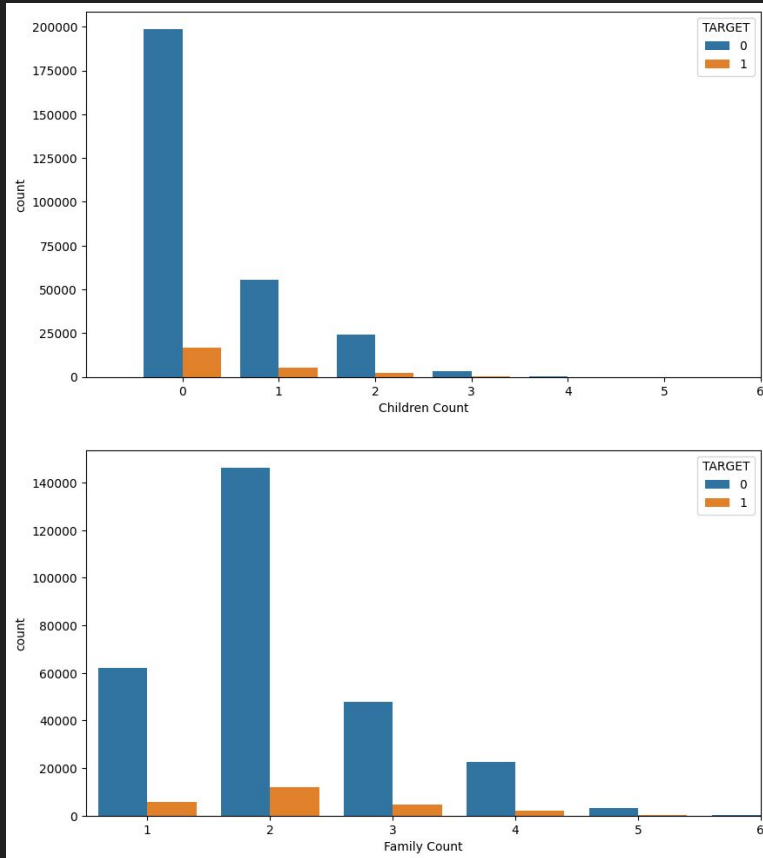
Data Imbalance is 11.39

GENDER



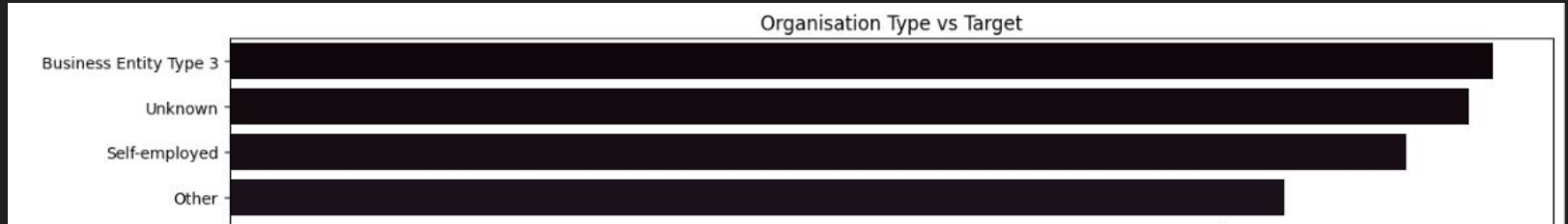
The number of female applicants with on-time payments is almost double than the Male applicants.

FAMILY COUNT



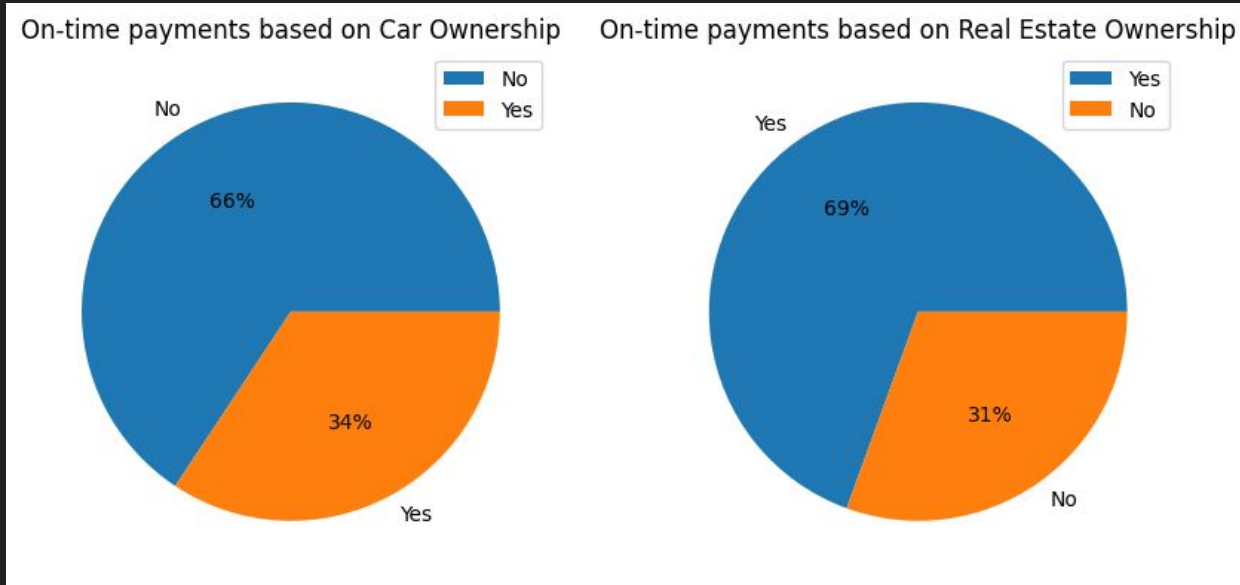
Applicants with on-time payments have no children and 2 family members.

ORGANISATION TYPE



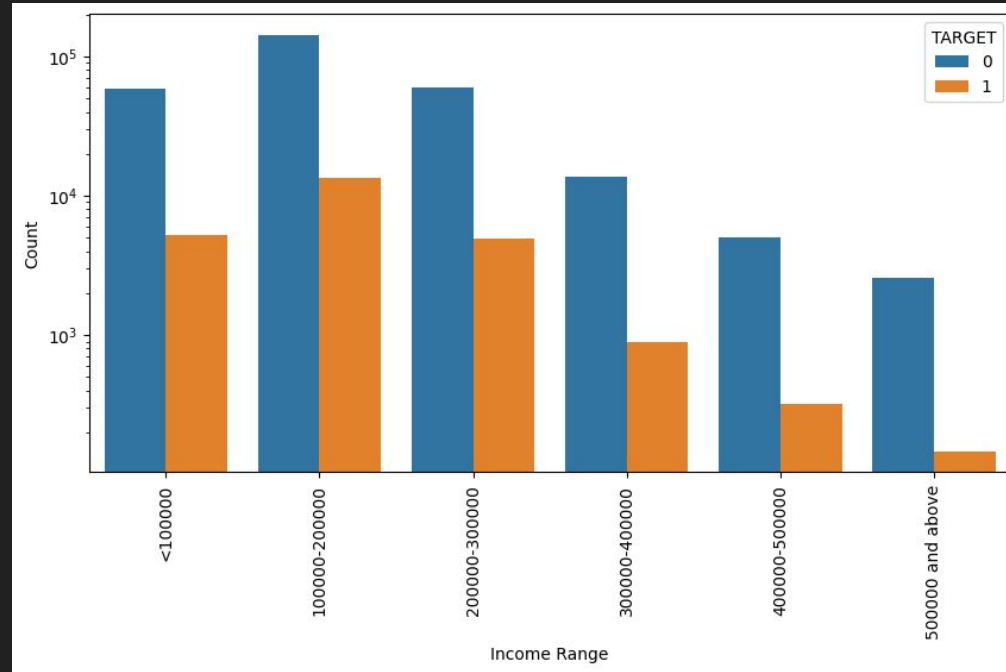
Most of the applicants who paid on time are either from Business Entity Type 3 or are self-employed individuals.

ASSETS



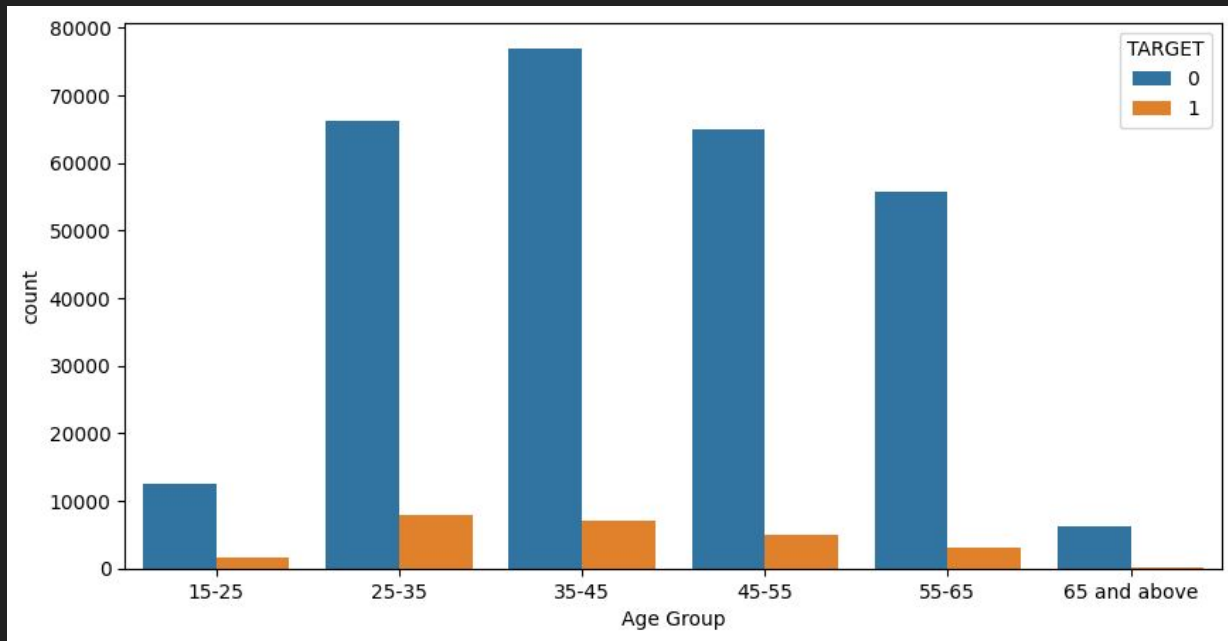
Applicants without a car have nearly double the successful repayments compared to those with a car. Additionally, applicants who own real estate property tend to have successful repayments, likely because they can use their property as collateral.

INCOME RANGE



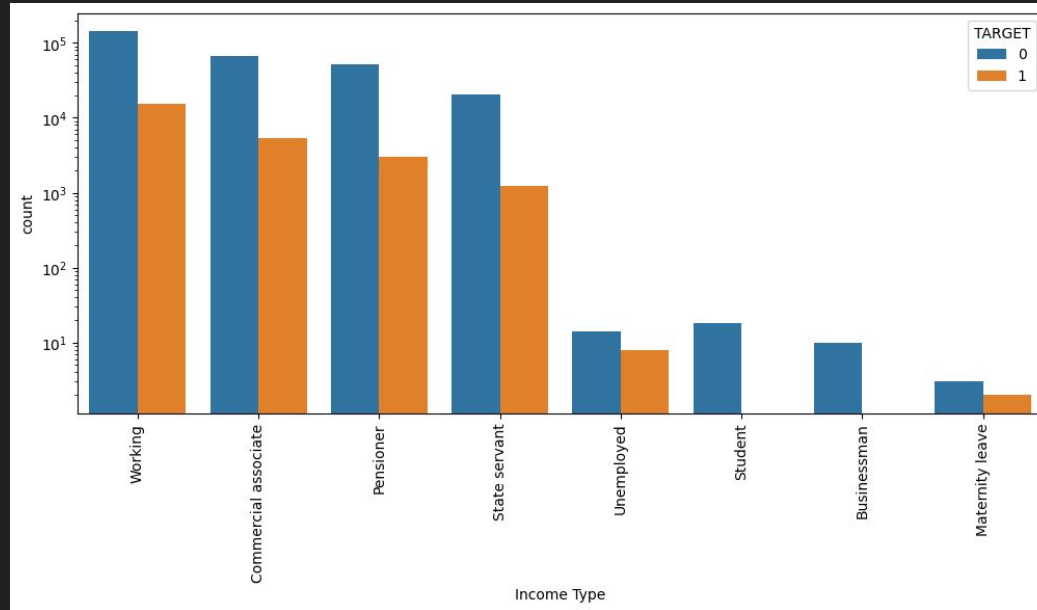
We usually expect that higher salaries would lead to more on-time payments. However, we observe a decrease in successful payments as salary increases beyond a certain range.

AGE GROUP



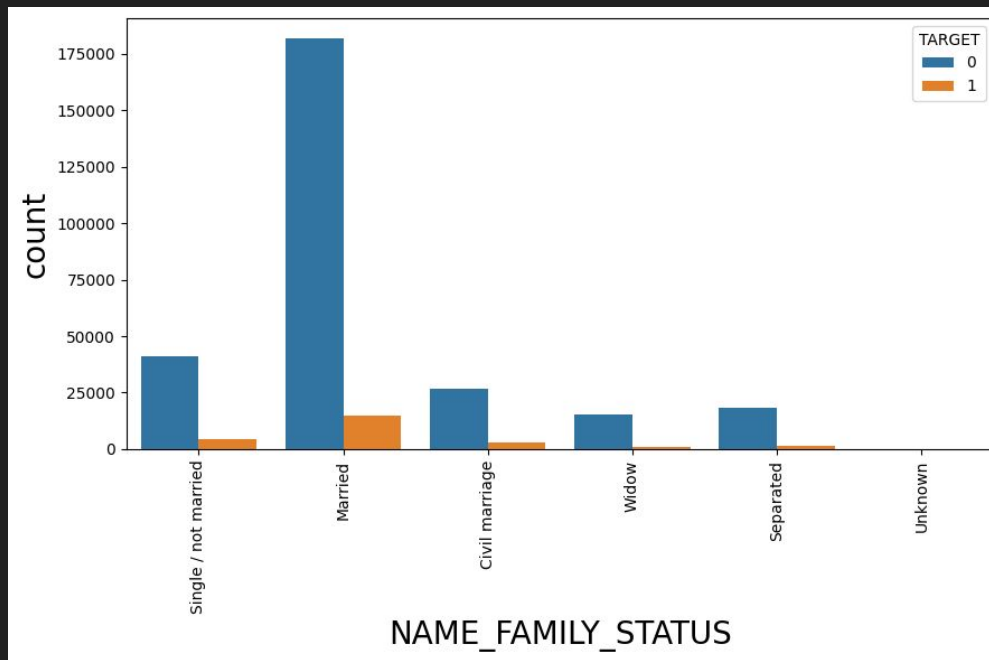
The majority of applicants who make on-time payments are aged between 25 and 65.

INCOME TYPE



Most of the applicants with on-time payment are from Working, commercial associates and Pensioner. Despite, there is a small percentage of applicants who are students and businessman, none of those applicants delayed in their repayment. Applicants who are Unemployed or on Maternity leave have difficulties in payment.

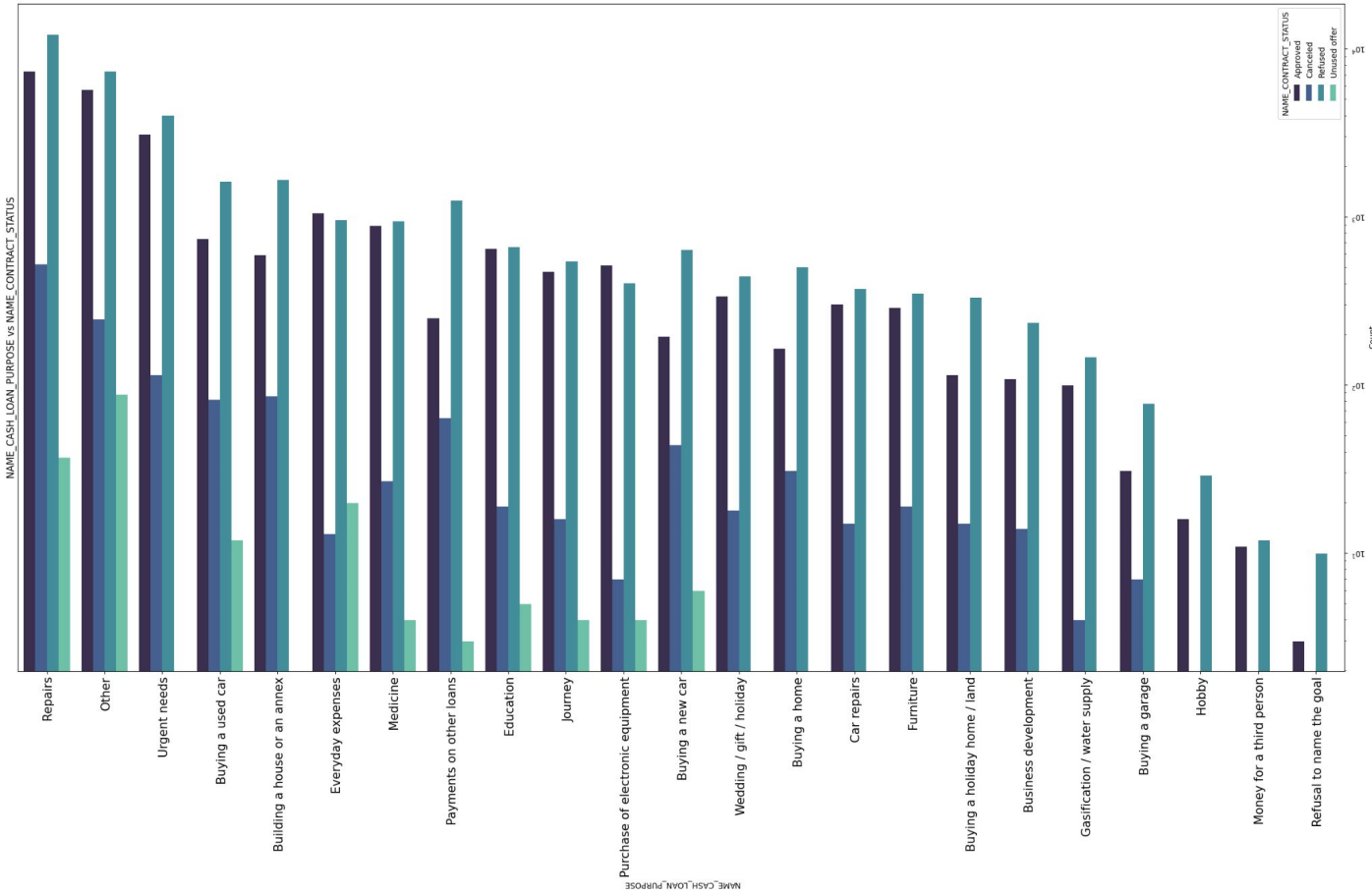
FAMILY STATUS



Although many applicants are married, we observe that most of the on-time payments are done by them.

MERGING CURRENT APPLICATION DATA
WITH PREVIOUS DATA

LOAN PURPOSE



Most loan rejections were for the purpose of "repairs." For education loans, there is an equal number of approvals and rejections.

CONCLUSION

- Banks should prefer giving loans to applicants who have no children and those who have less than 3 family members.
- Most applicants who make on-time payments are between the ages of 25 to 65.
- Banks should prefer giving loans to applicants whose income type is Working, Commercial associates, pensioners or state servants.
- Banks should not prefer giving loan to applicants who are on maternity leave or unemployed.
- Applicants who don't own a car and own at least one real-estate property are safest to give loan.