

CREDIT-EDA ASSIGNMENT

KUMAR MAYANK

UPGRAD DS C62

PROBLEM STATEMENT

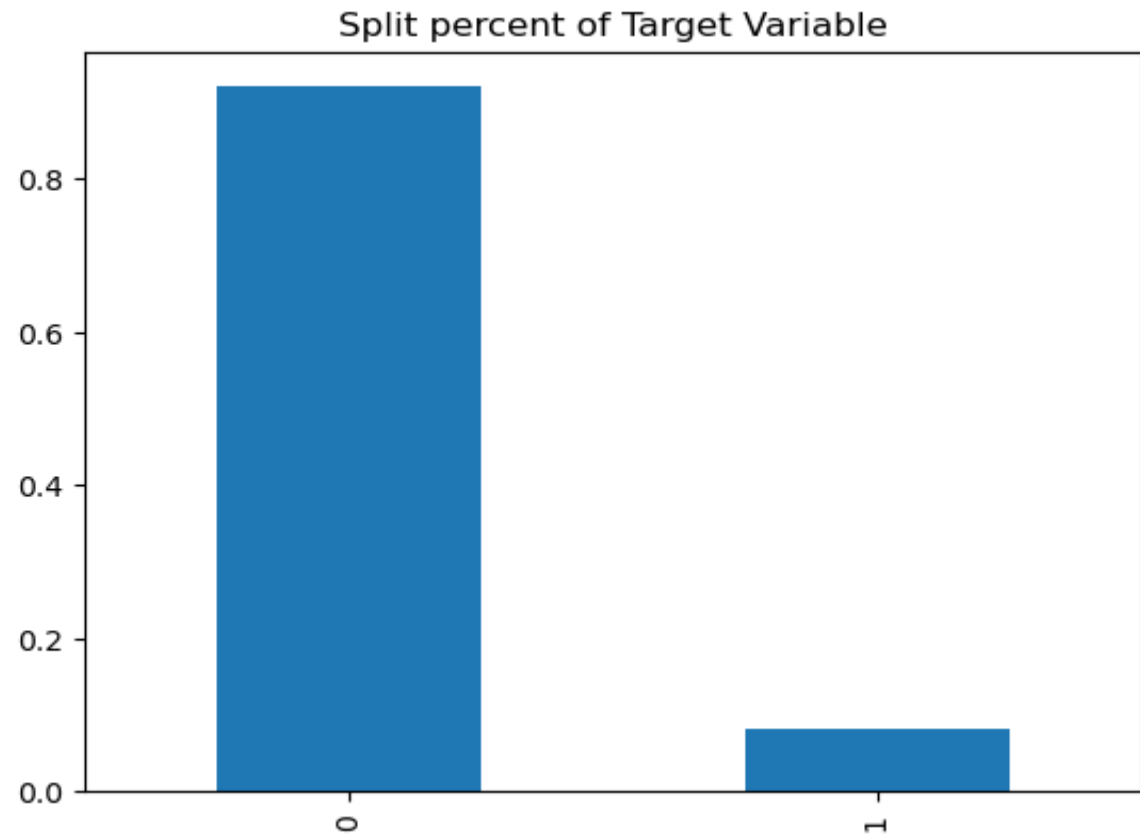
- The loan providing companies find it hard to give loans to the people due to their insufficient or non-existent credit history. Because of that, some consumers use it to their advantage by becoming a defaulter. Suppose you work for a consumer finance company which specialises in lending various types of loans to urban customers. You have to use EDA to analyse the patterns present in the data. This will ensure that the applicants capable of repaying the loan are not rejected.

BUSINESS OBJECTIVES

This case study aims to identify patterns which indicate if a client has difficulty paying their instalments 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. This will ensure that the consumers capable of repaying the loan are not rejected.

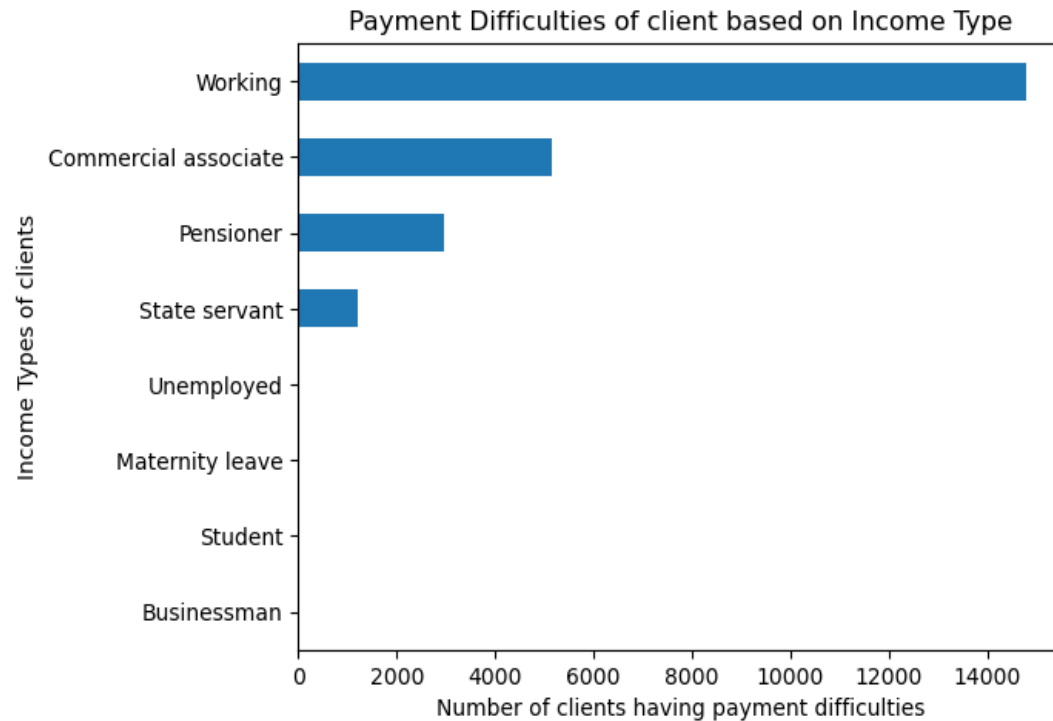
DETAILS OF ANALYSIS

- Split Percentage of Target Variable ,wherein it clearly shows that our data is imbalanced. But that is the expected one in Financial Industry.

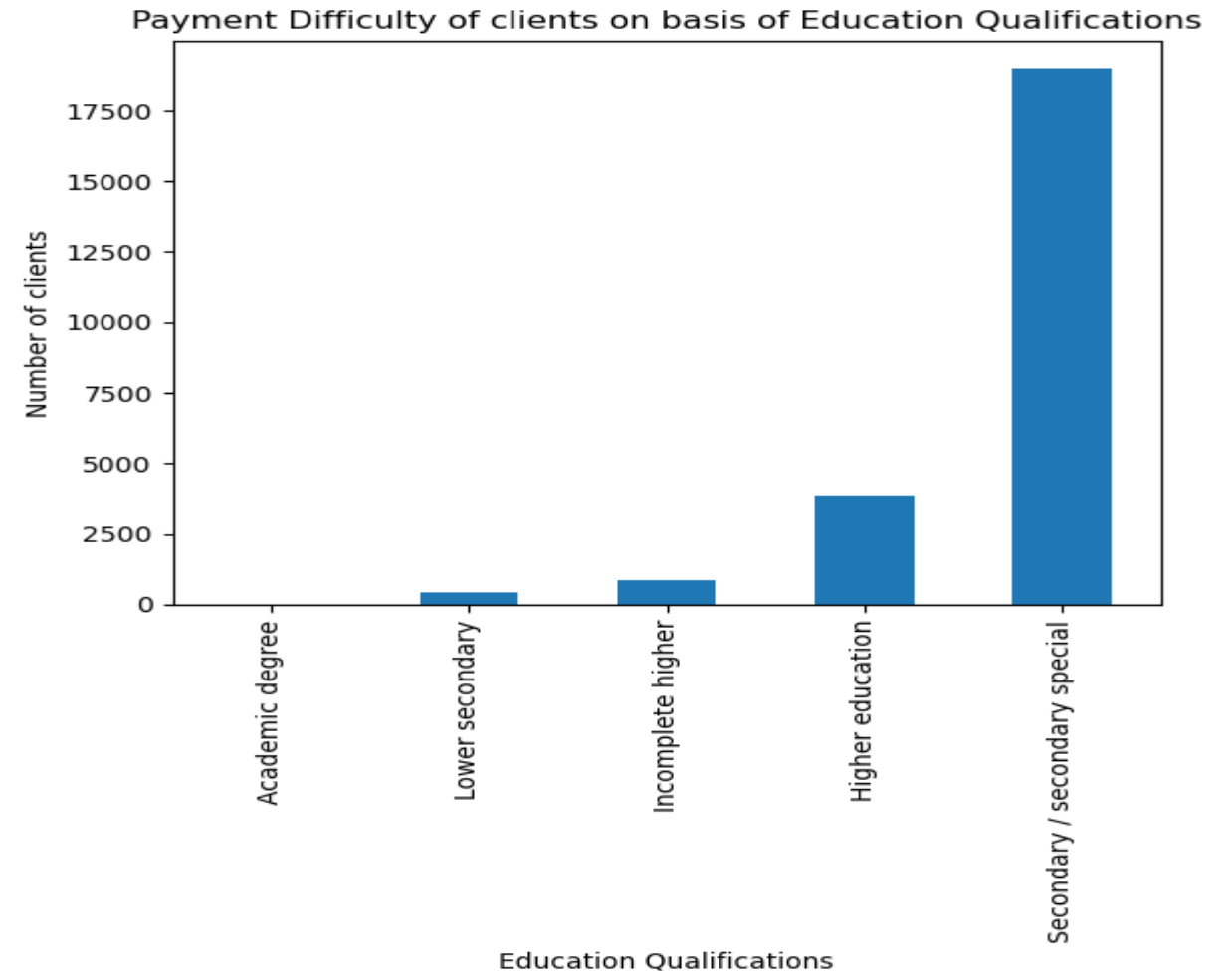


Here we can see Working class clients and clients who has only completed secondary Education are facing Difficulties in making the Payment

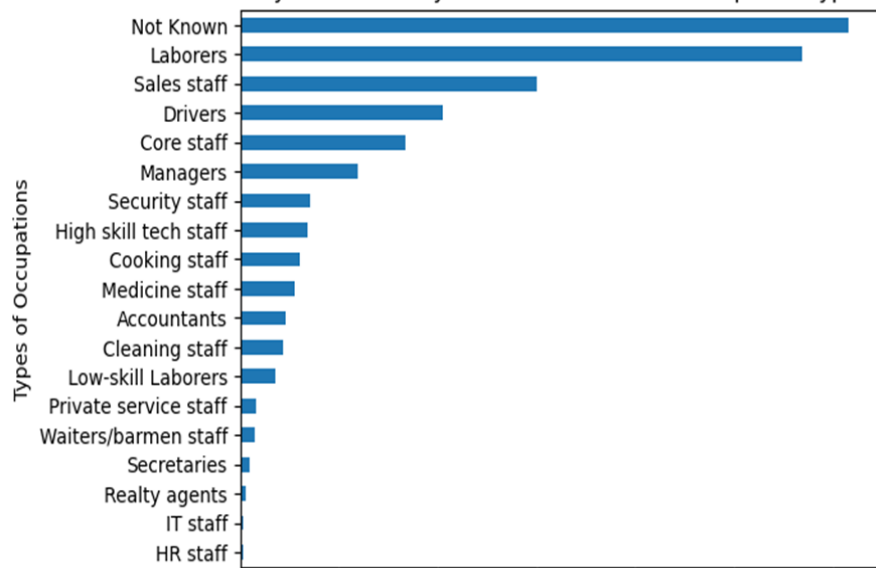
Client with Payment Difficulties Based On Income Type



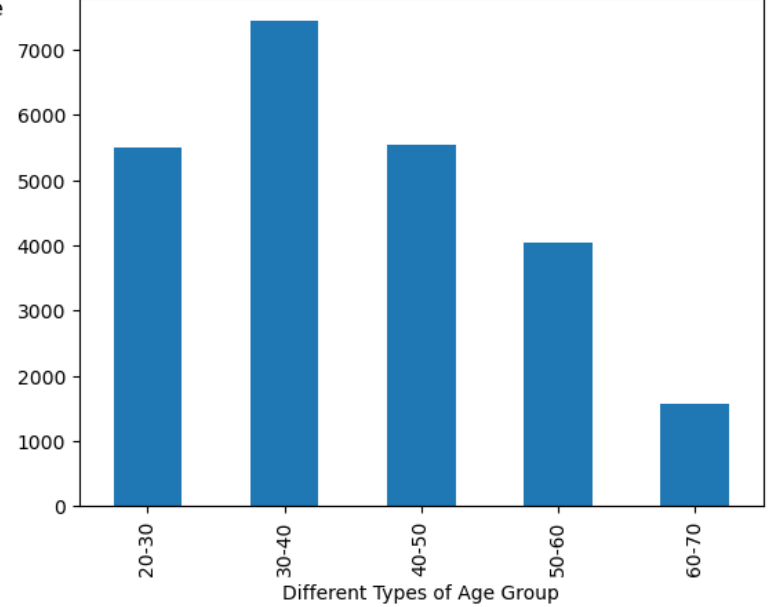
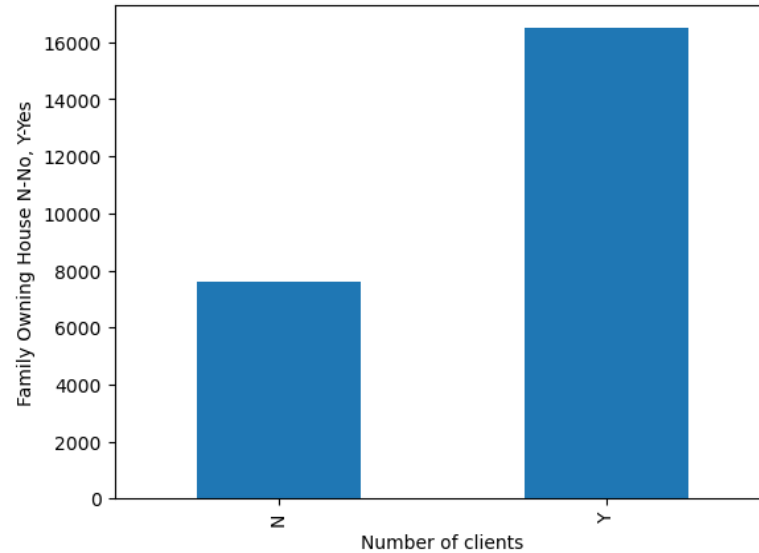
Payment Difficulty of clients on basis of Education Qualifications.



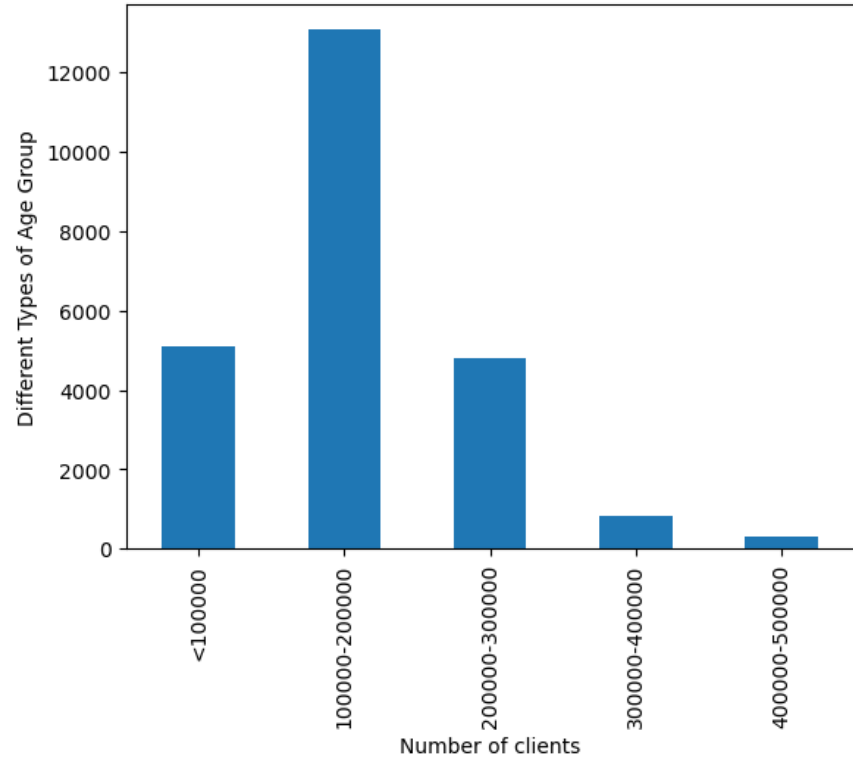
Payment Difficulty of clients on basis of Occupation Types



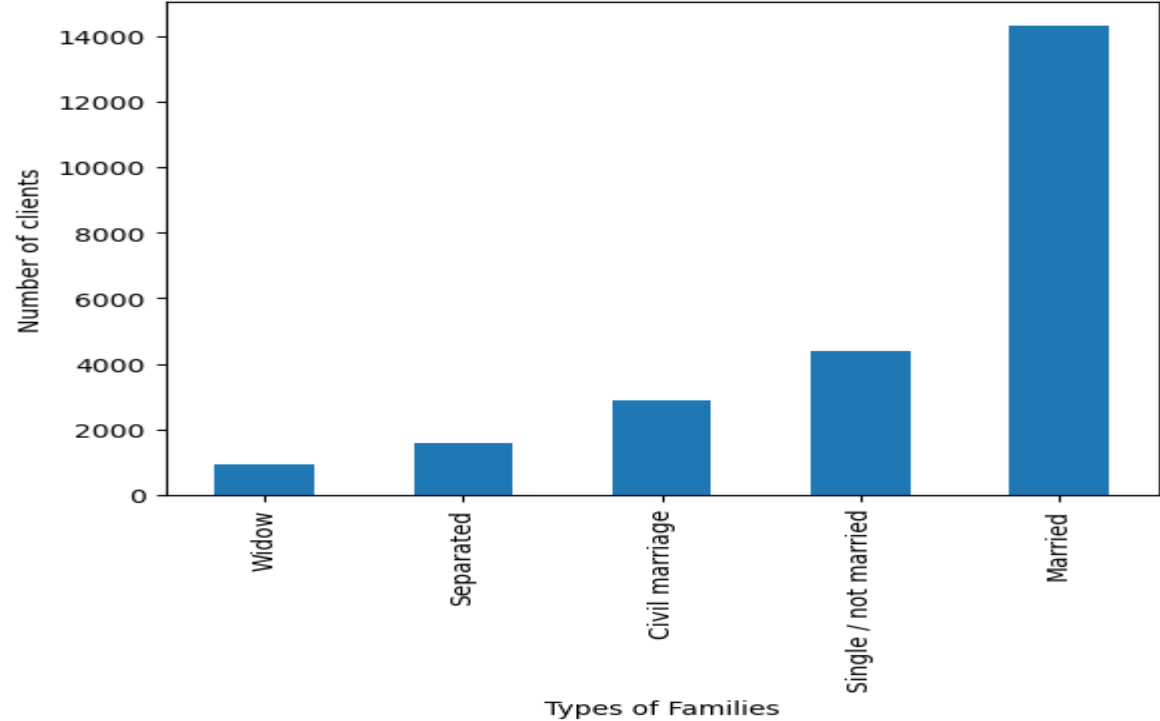
Payment Difficulty of clients on basis of Clients owning a House

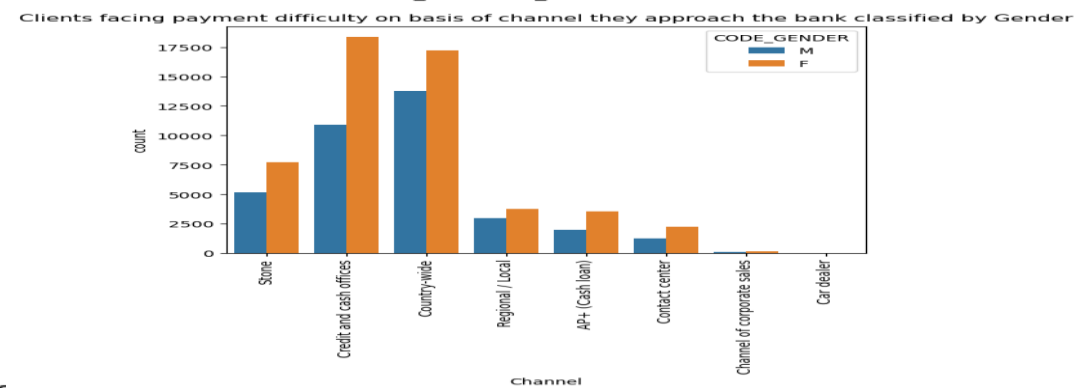
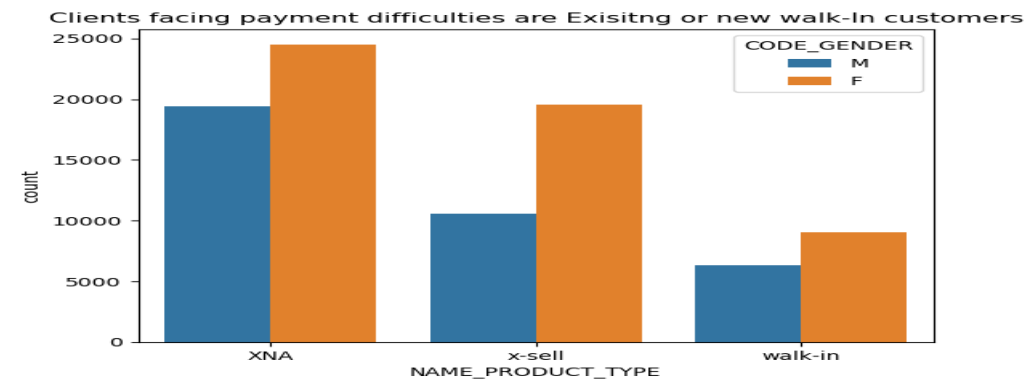
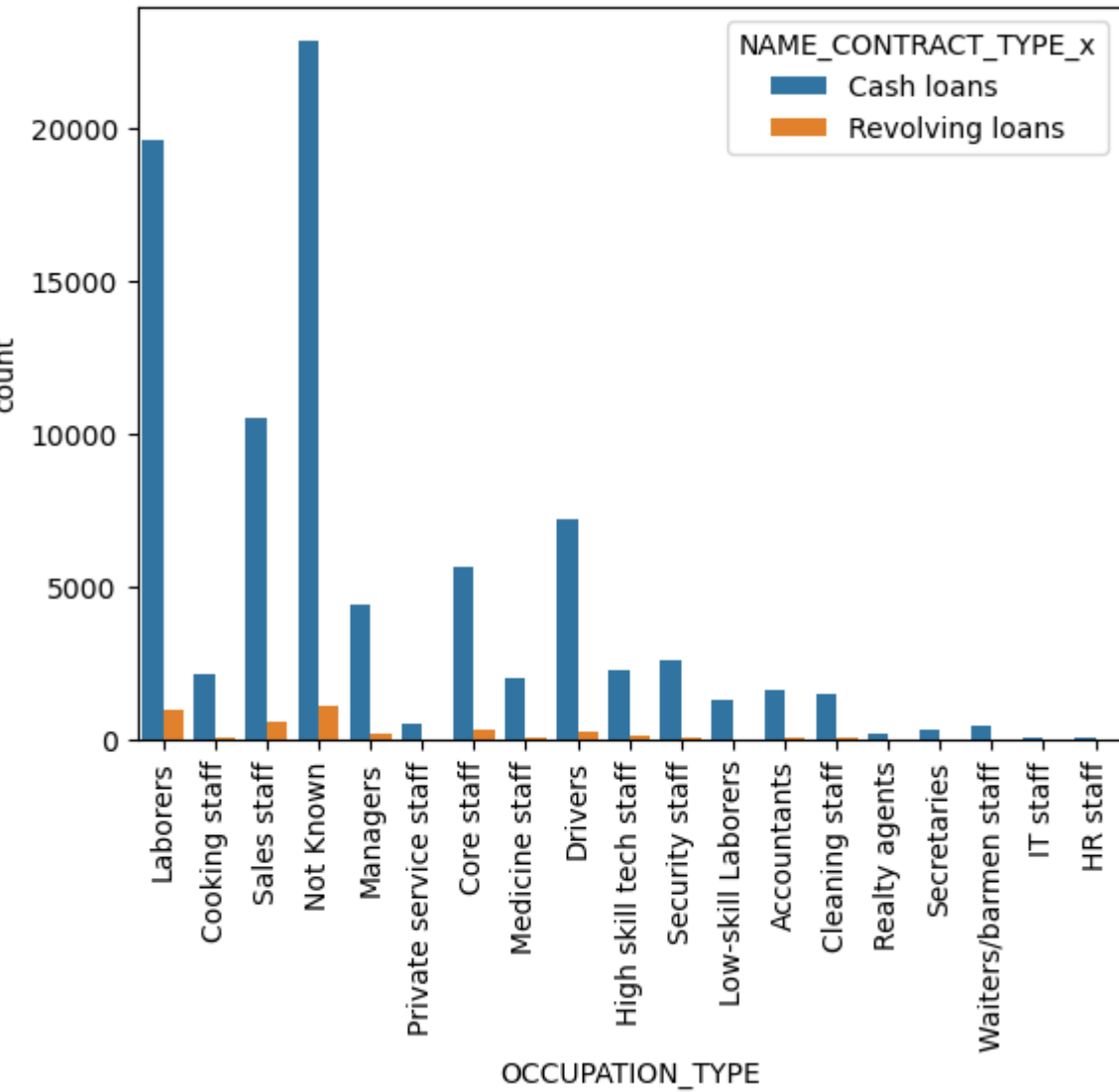


Payment Difficulty of clients on basis of Income

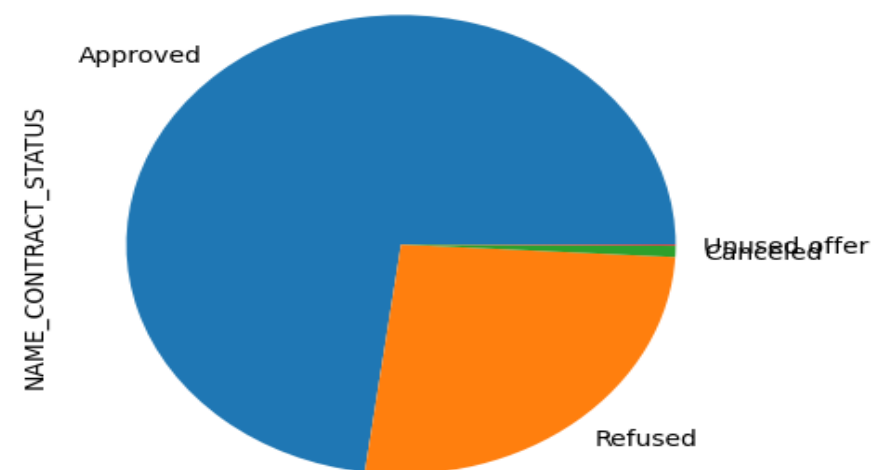


Payment Difficulty of clients on basis of Family Status





Distribution of client facing difficulties on basis of their previous loans status



Observations

- Cash loan Generally contains most of the bank's Portfolio.
- Clients with Education level upto Secondary Education are facing difficulty in On-Time Payment.
- Laborers and generally other low income group persons are facing difficulties in On-Time Payment.
- Age-Group 30-40 years are facing Payment difficulty which might be due to more family commitments.
- Around 25-26% where clients are facing payment difficulties, earlier those clients has refused the loan.
- On going through the previous data, I have also observed that customer approaching Bank through 'Credit and Cash Offices' have higher payment difficulties.
- Some of the clients which are not new to bank are also having higher payment difficulties than customers who are walked-in. But most of the data are not present regarding this.

Recommendations

- Clients with Good Education Level ie. Greater than Secondary Education should be focused more giving credit.
- Clients with Low Income Job, should be avoided if any irregularities are there in the credit history.
- Clients who already own a real-estate property should be charged high interest rate for new credit.
- Clients in the Age Group 20-30 years could be given credit of good amount as per their eligibility.

THANK YOU