

PRESENTATION ON CREDIT EDA CASE STUDY ON BANKING ANALYSIS

**BY
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PURPOSE

- Credit risk analysis.....
- It will help the company
- to make decision for loan approval based on the applicant profile,
- which will reduce the credit loss as well as interest loss ... (NPA)
- It will save company from financial loss also help smooth transaction and generate good amount of revenue....
- by help of EDA I will help company which not only help for credit loss but also I will try it will differentiate between revenue generating interest and NPA.

STEPS FOR ANALYSIS

- Data understanding
- Data sourcing
- Data cleaning
- Univariate analysis
- Bivariate analysis and multivariate analysis
- Merging of application data with previous data
- Data analysis
- Recommendation on risk

DATA UNDERSTANDING AND SOURCING

- FROM UPGRAD MODULE CASE STUDY PROBLEM
- "application_data.csv"its it's a private data releted to banking
- Our task to analysis data with help of eda.
- Data shape ...(307511, 122)

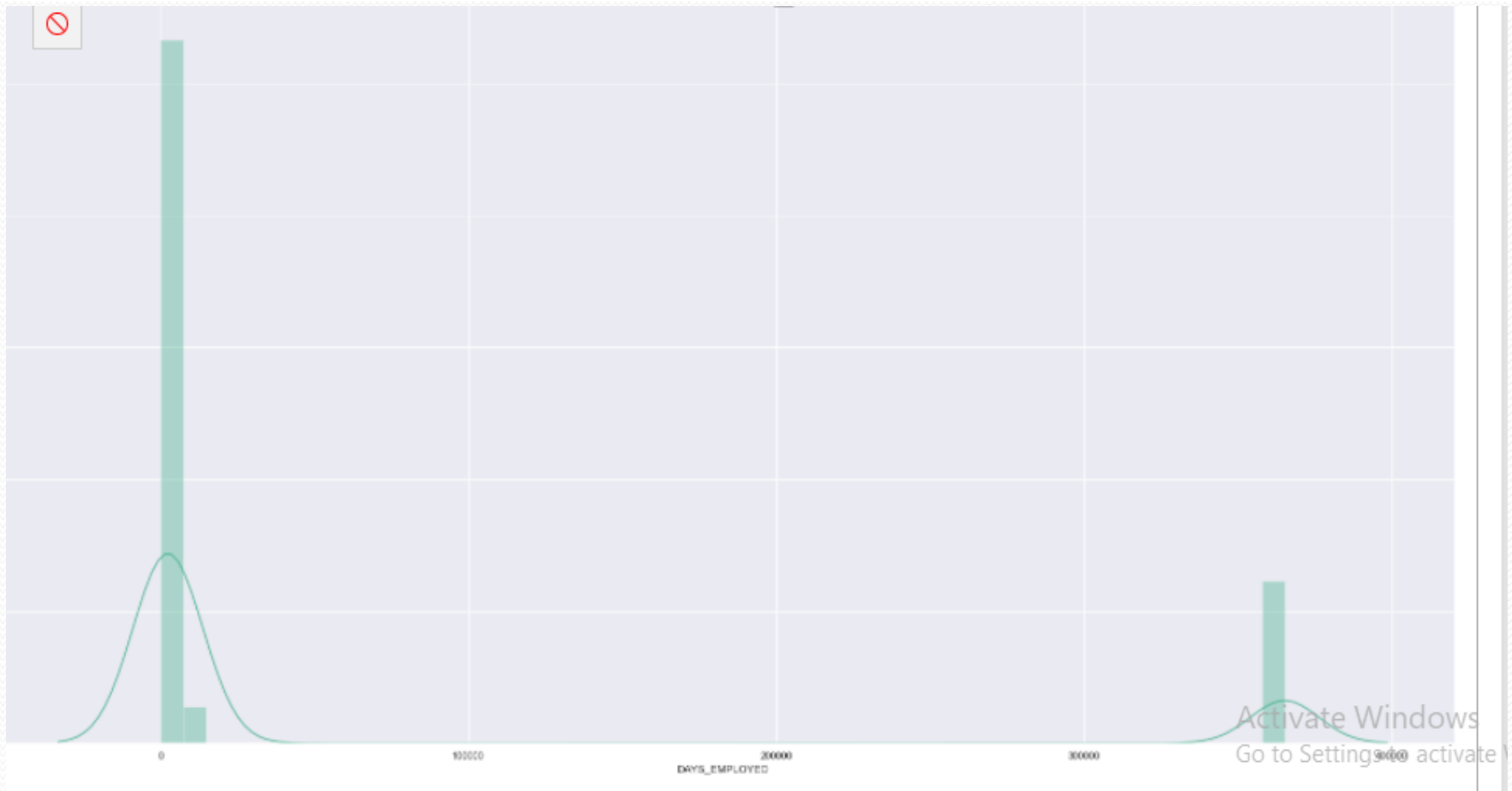
DATA CLEANING

I HAVE CLEAN THE DATA WITH FOLLOWING PROCESS

- 1.IDENTIFYING THE DATA TYPES
- 2.FIXING THE ROWS AND COLUMN
- 3.IMPUTING/REMOVING MISSING VALUES
- 4.HANDLING OUTLIERS
- 5.STANDARISING THE VALUES
- 6.FIXING INVALID VALUES
- 7.FILTERING THE DATA

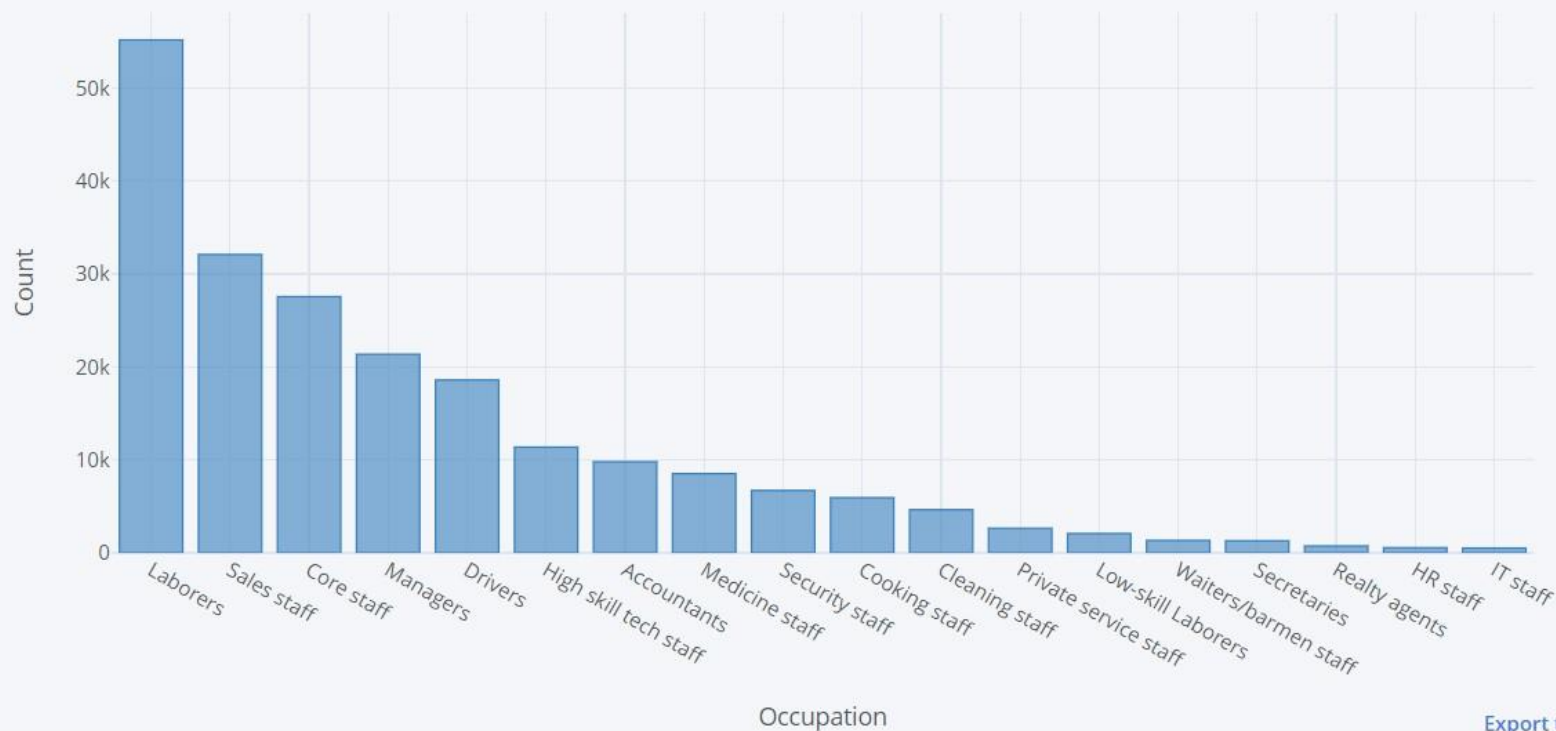
ANALYSIS

Distribution of DAYS_EMPLOYED



Distribution of OCCUPATION_TYPE

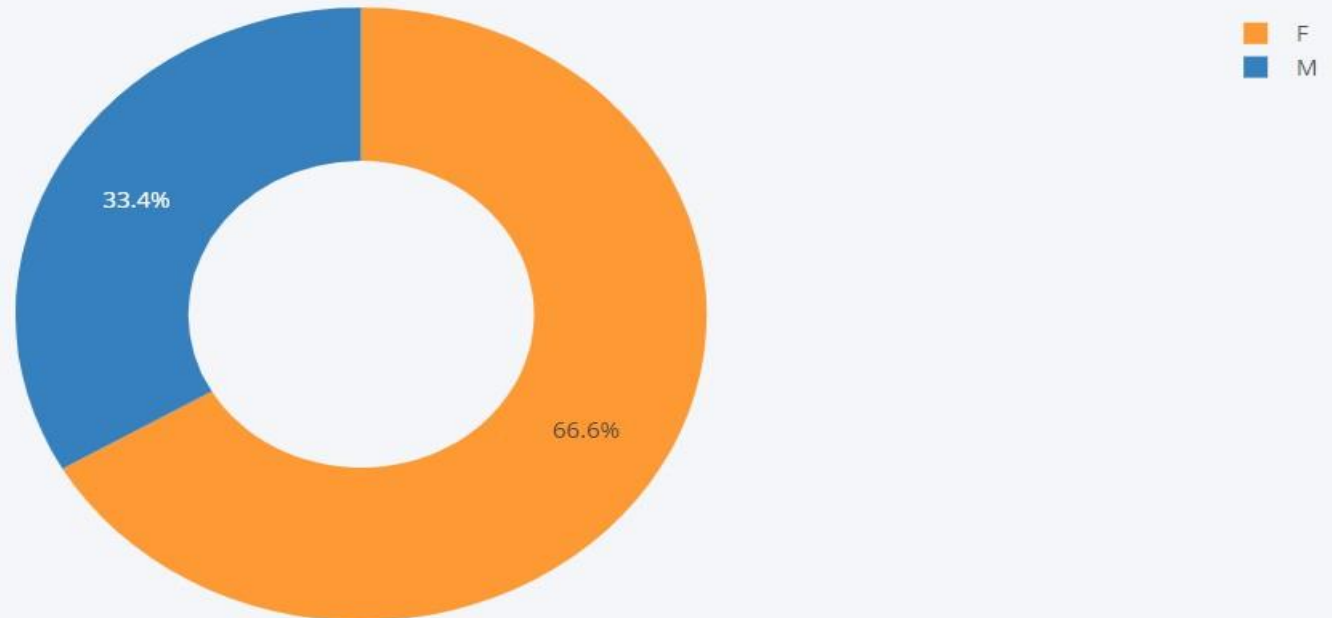
Occupation of Applicant's who applied for loan



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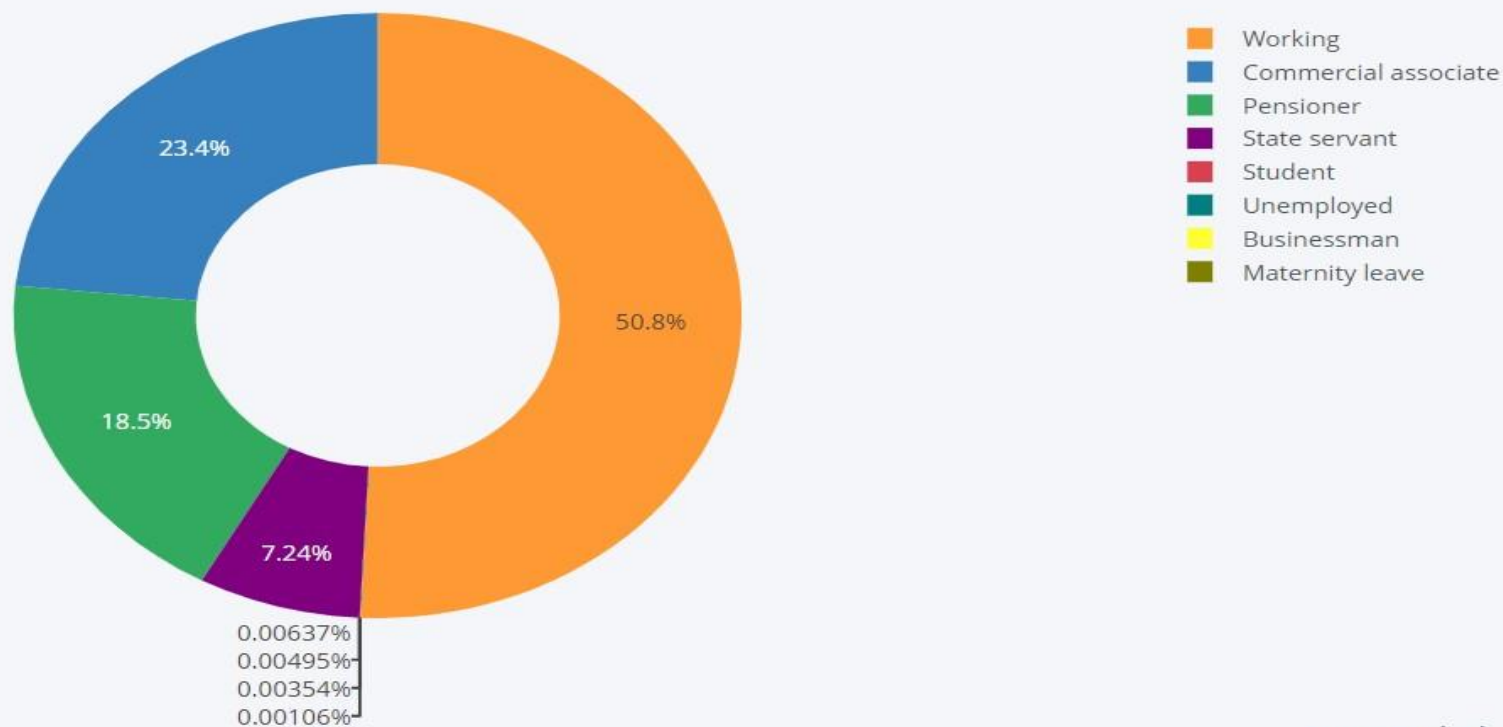
Gender Distribution of Loan Non-Payment Difficulties

Gender Distribution of Loan- Non Payment Difficulties



Income sources of Loan- Non Payment Difficulties

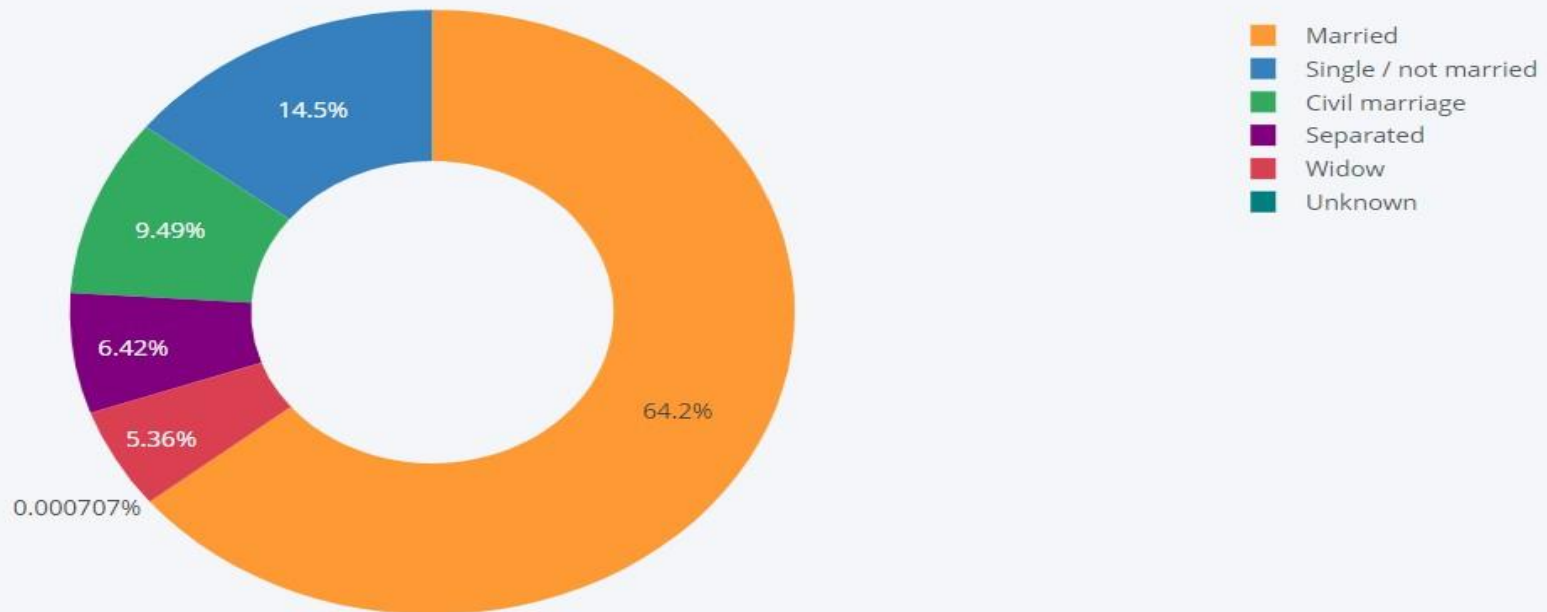
Income sources of Loan- Non Payment Difficulties



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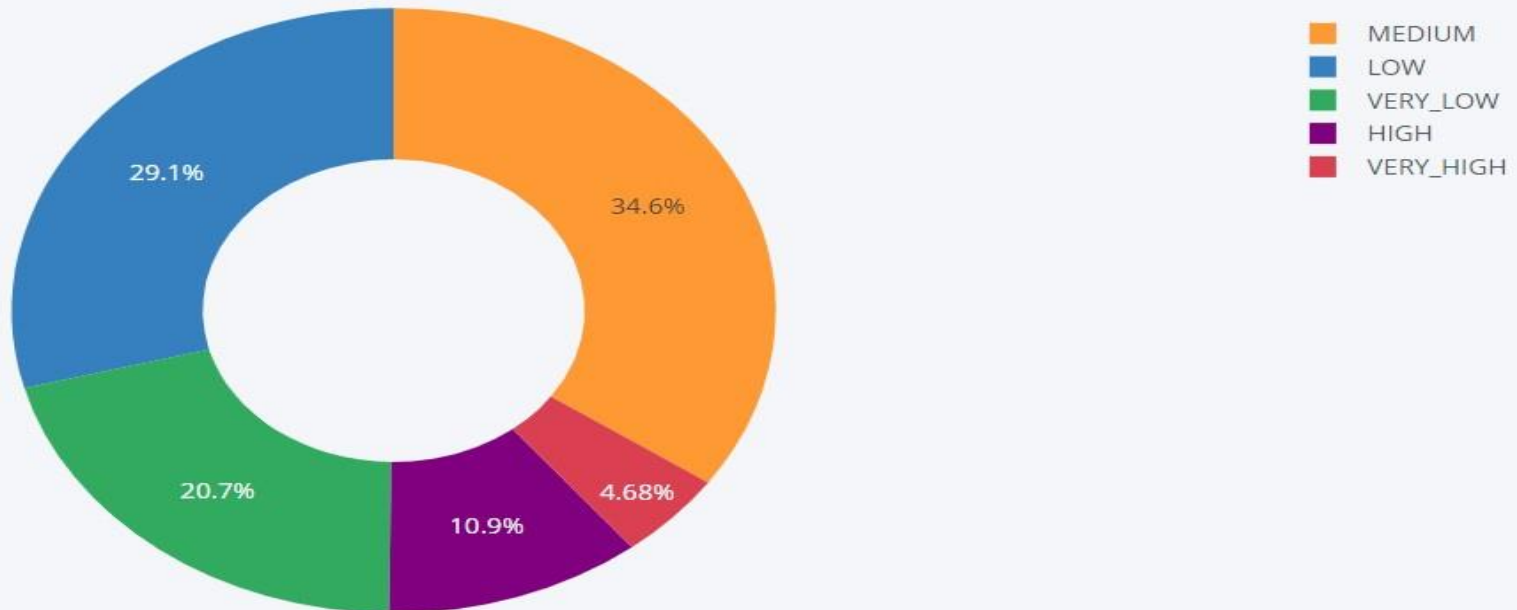
Family Status of Loan- Non Payment Difficulties

Family Status of Loan- Non Payment Difficulties



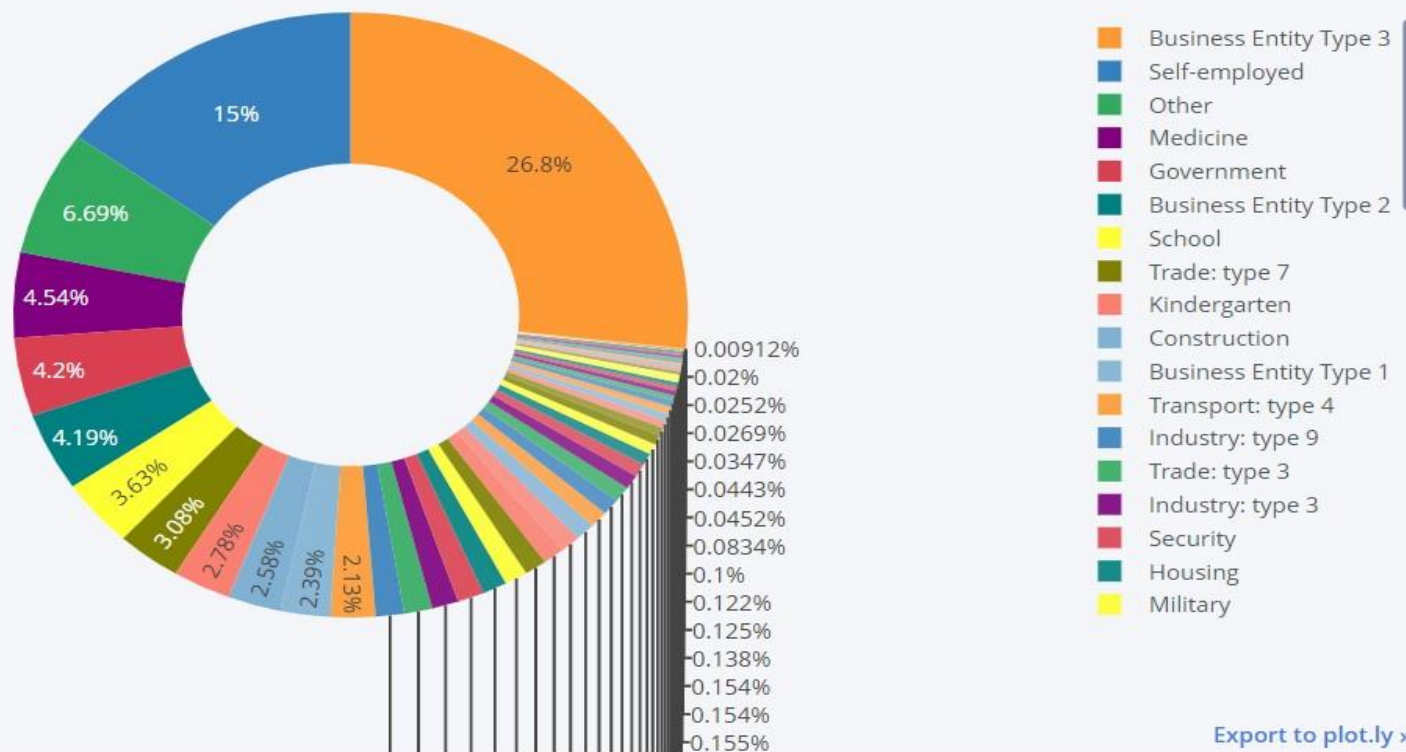
Income range of Loan-Non Payment Difficulties

Income range of Loan-Non Payment Difficulties

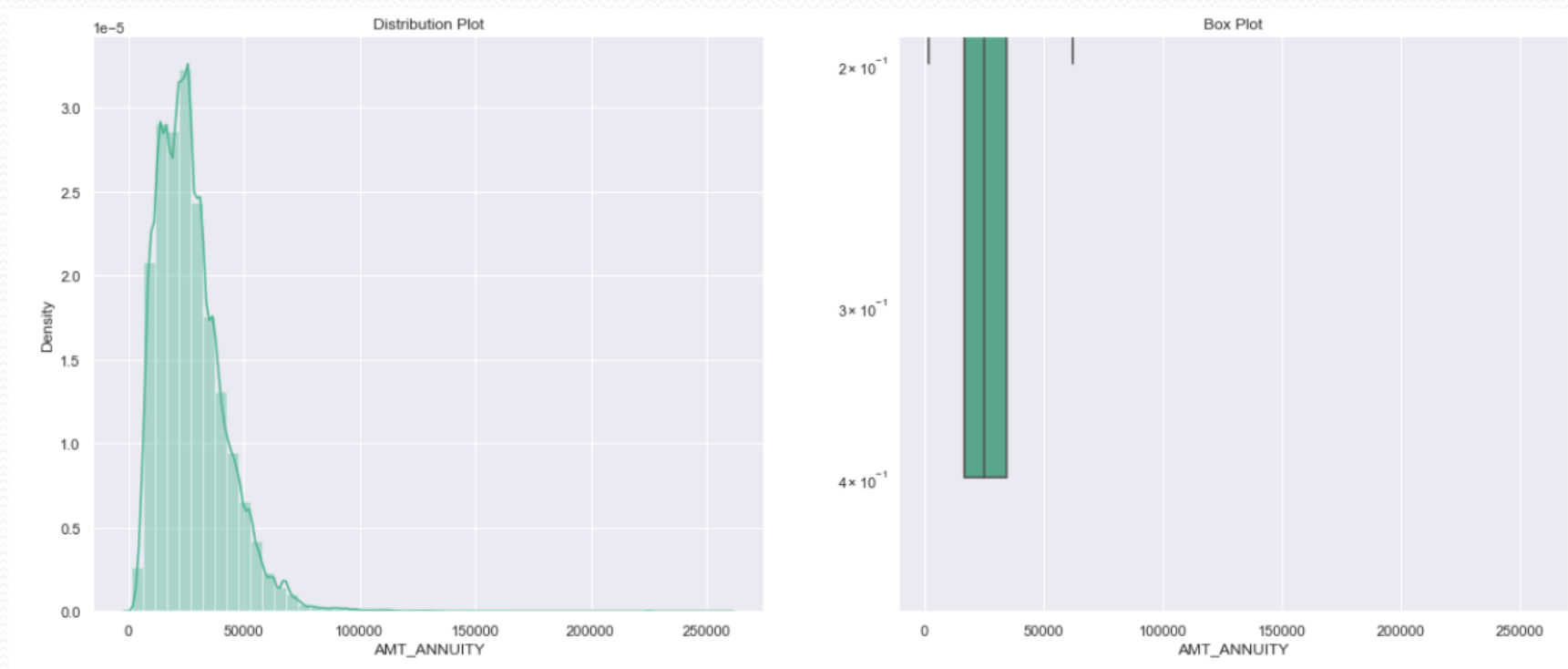


Types of Organizations who applied for loan - Non-Payment Difficulties

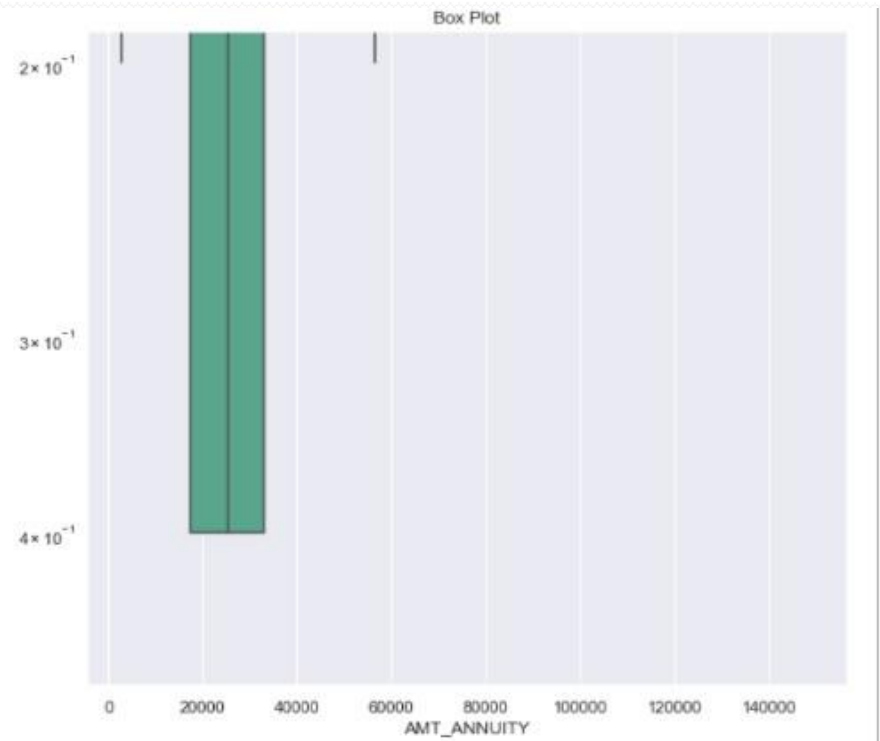
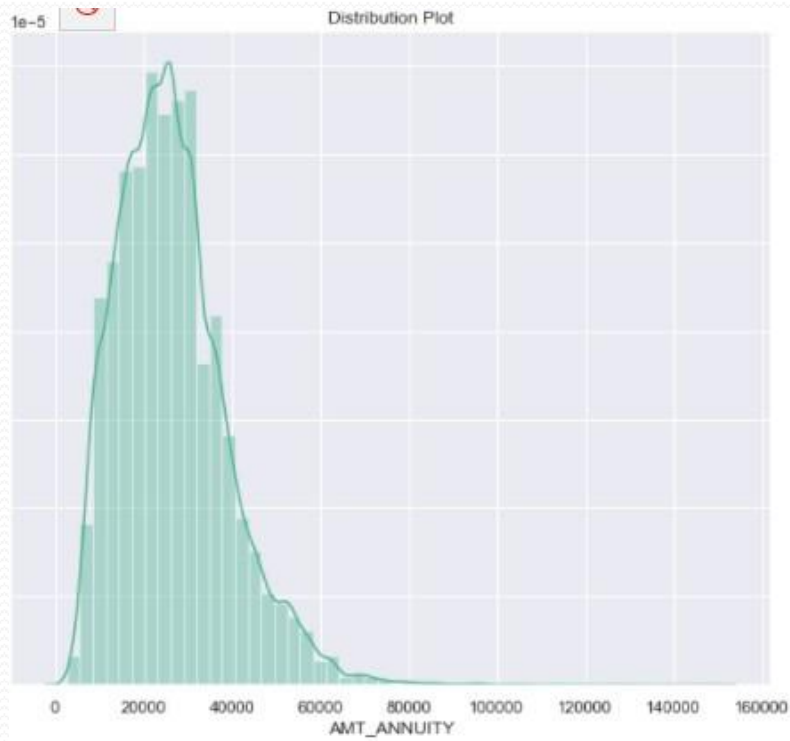
Types of Organizations who applied for loan - Non-Payment Difficulties



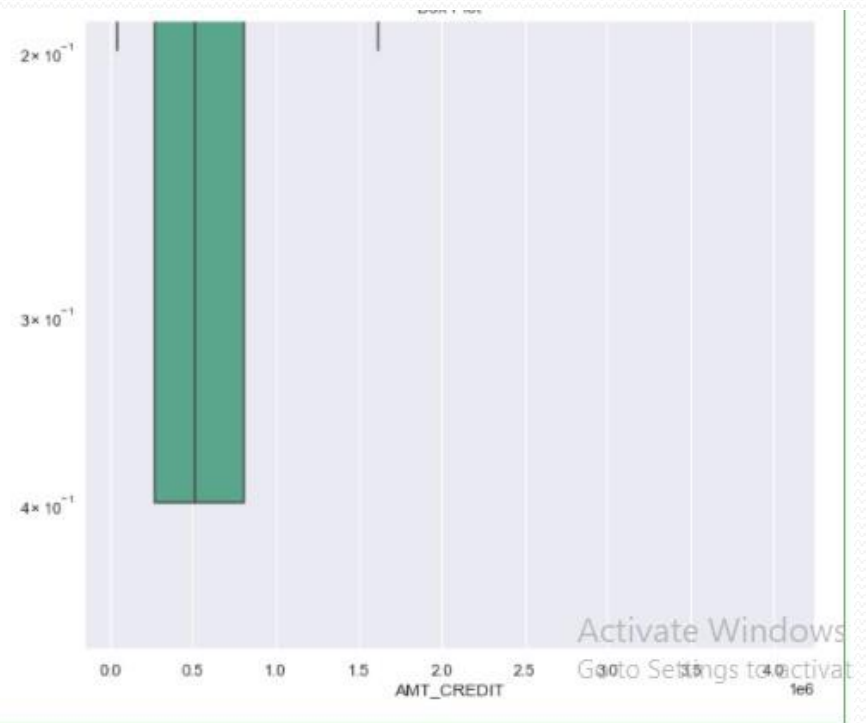
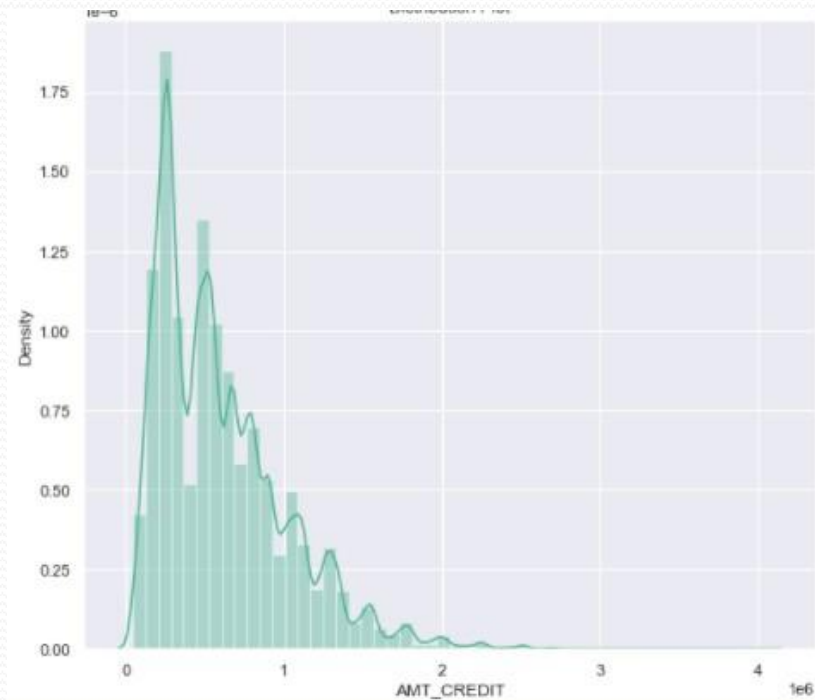
Univariate Analysis of Numerical Variables on the basis of 'Target' Variable Distribution and Box plot for 'AMT_ANNUITY' for Loan Non-Payment Difficulties



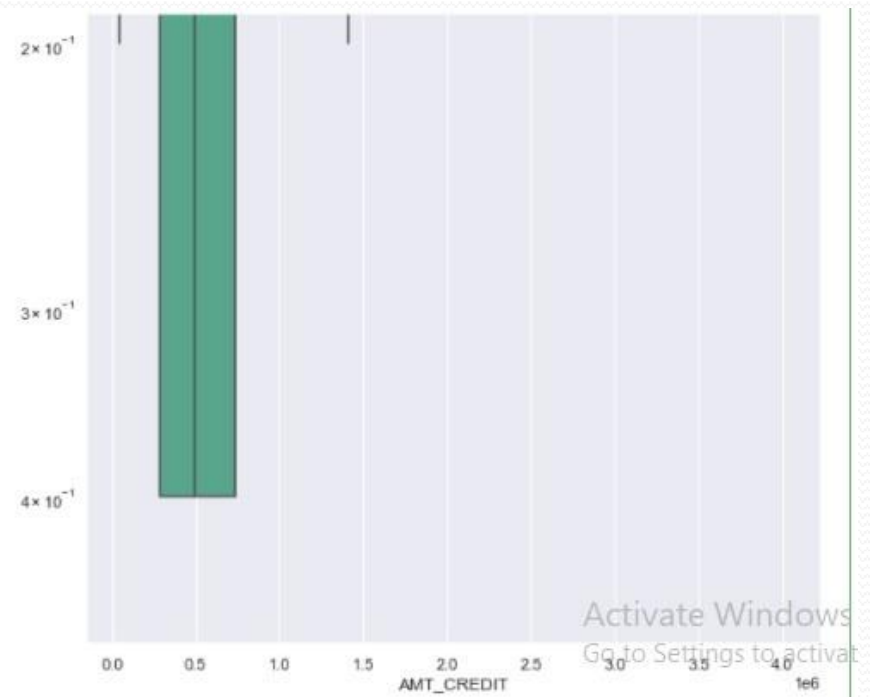
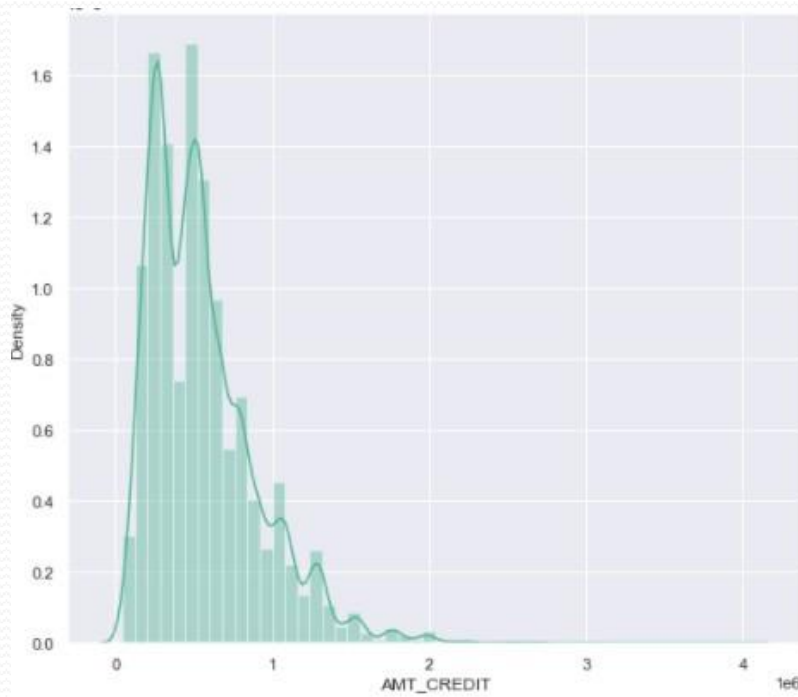
Distribution and Box plot for 'AMT_ANNUITY' for Loan- Payment Difficulties



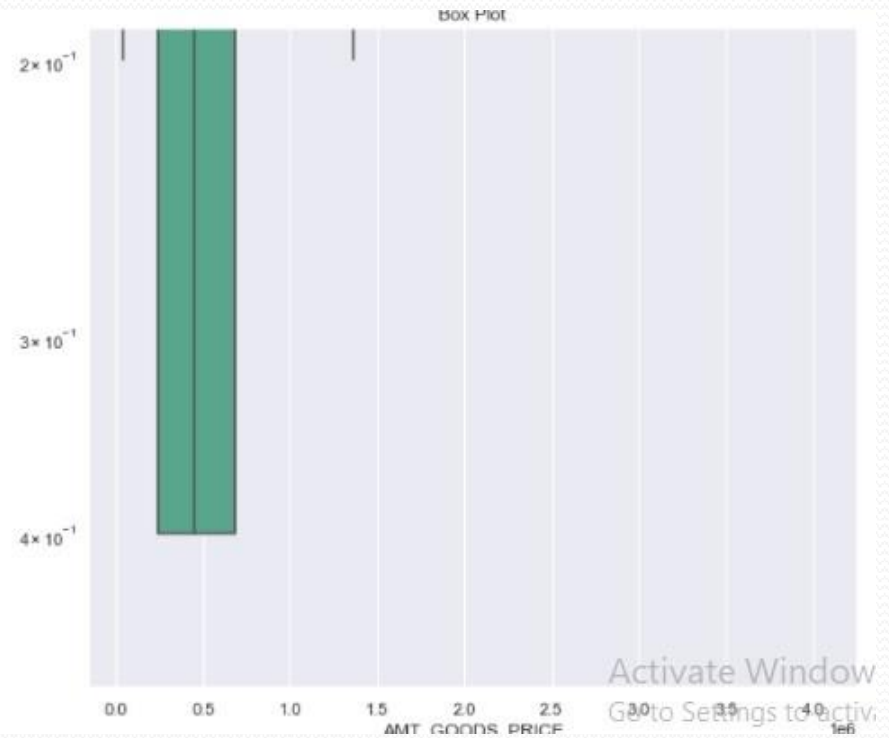
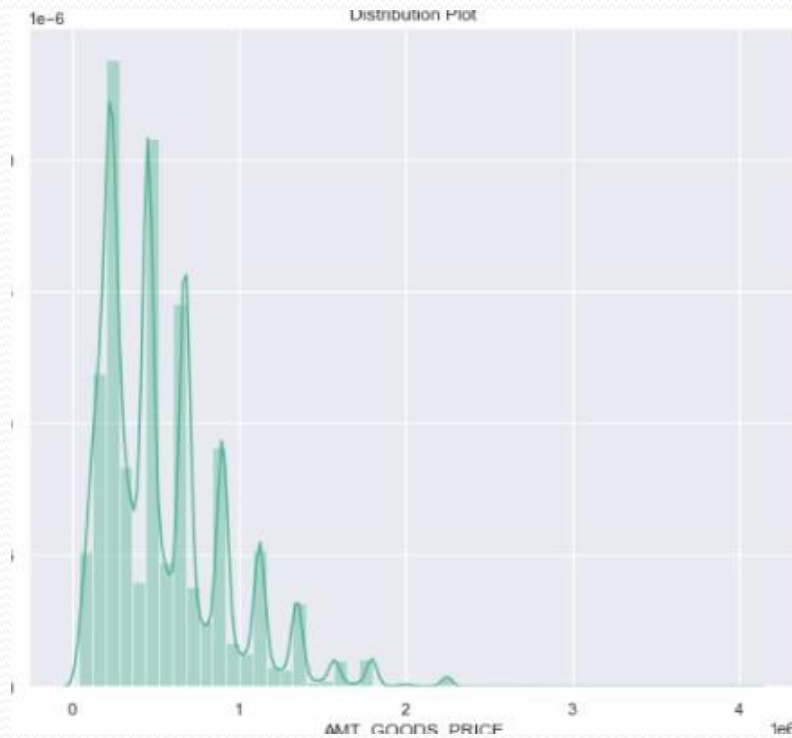
Distribution and Box plot for 'AMT_CREDIT' for Loan Non-Payment Difficulties



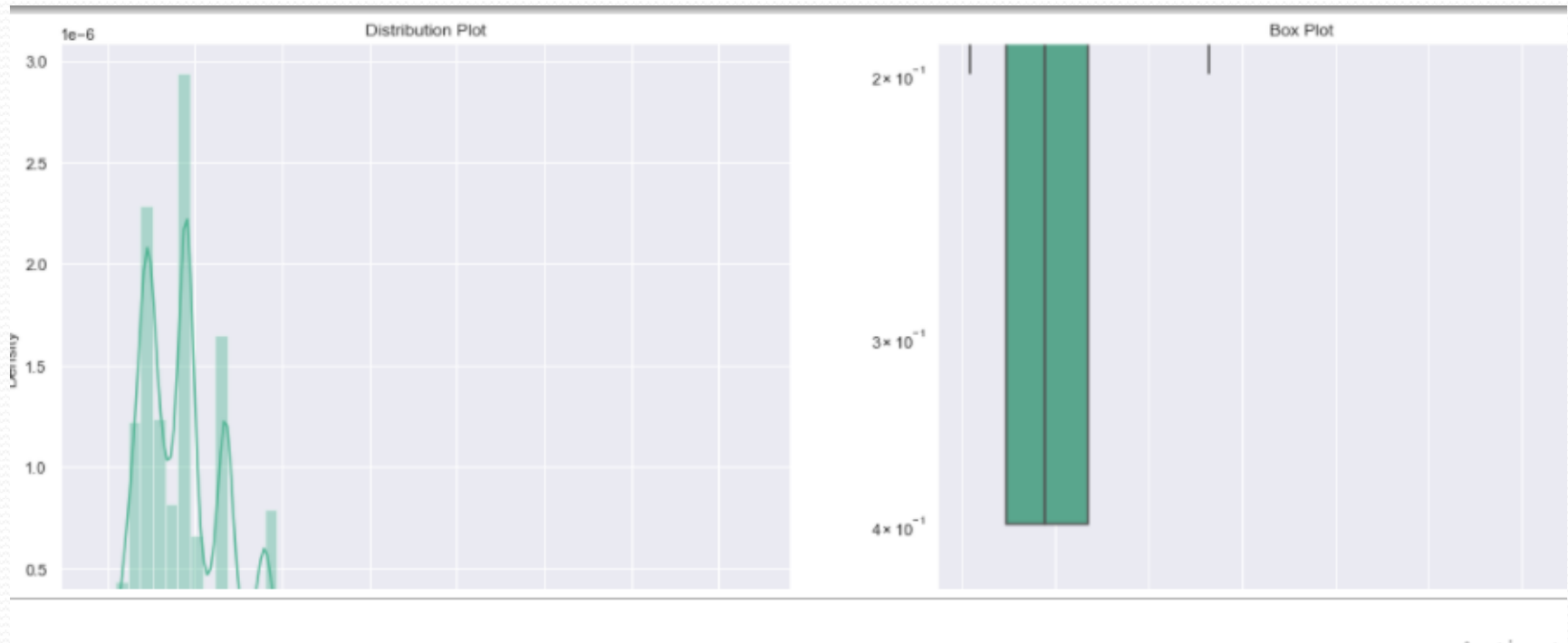
Distribution and Box plot for 'AMT_CREDIT' for Loan Payment Difficulties



Distribution and Box plot for 'AMT_GOODS_PRICE' for Loan- Non-Payment Difficulties

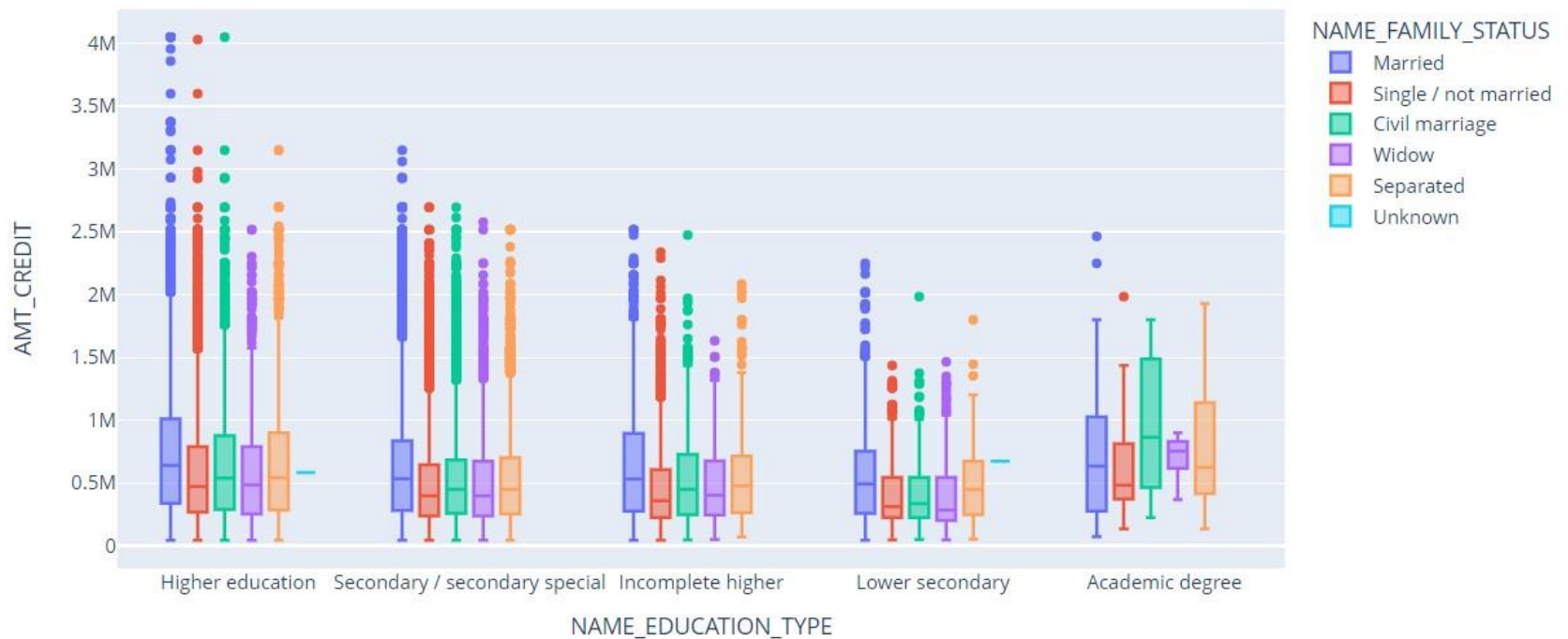


Distribution and Box plot for 'AMT_GOODS_PRICE' for Loan-Payment Difficulties



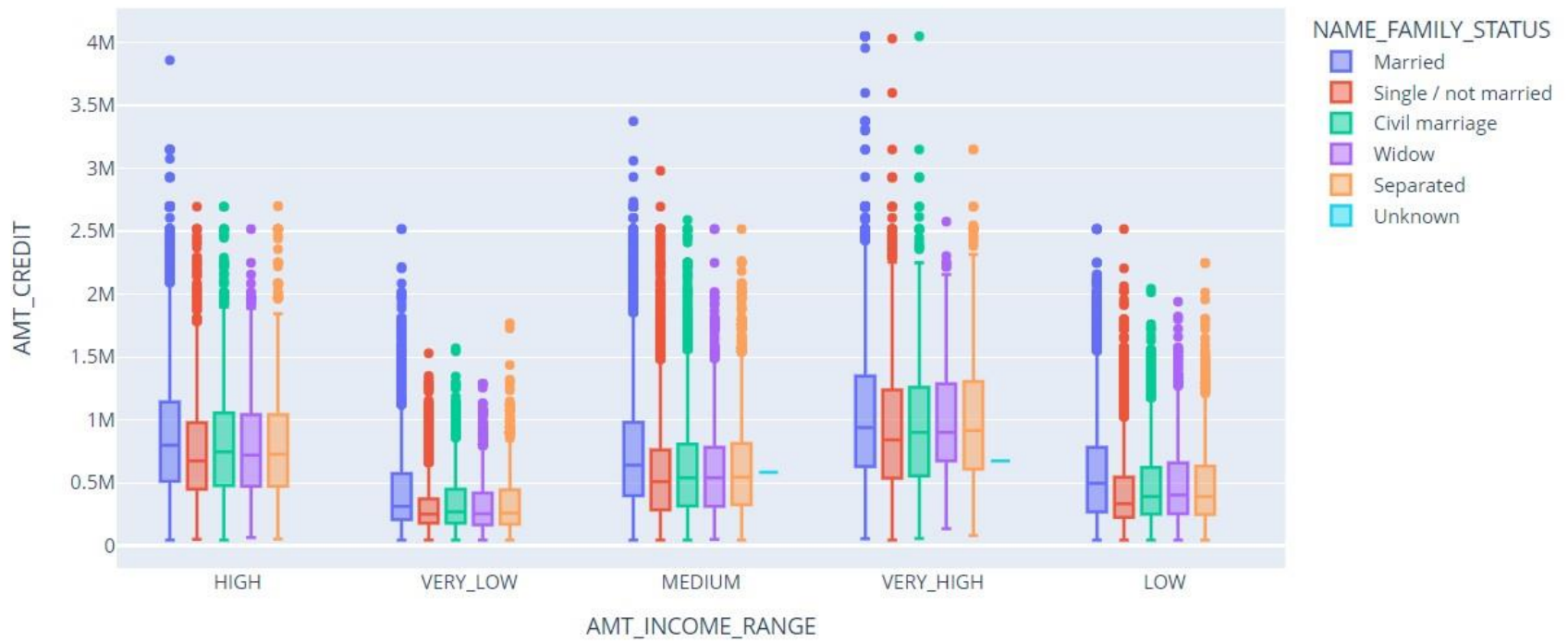
Bivariate Analysis of Categorical vs Numerical Variables

Credit amount vs Education of Loan- Non Payment Difficulties



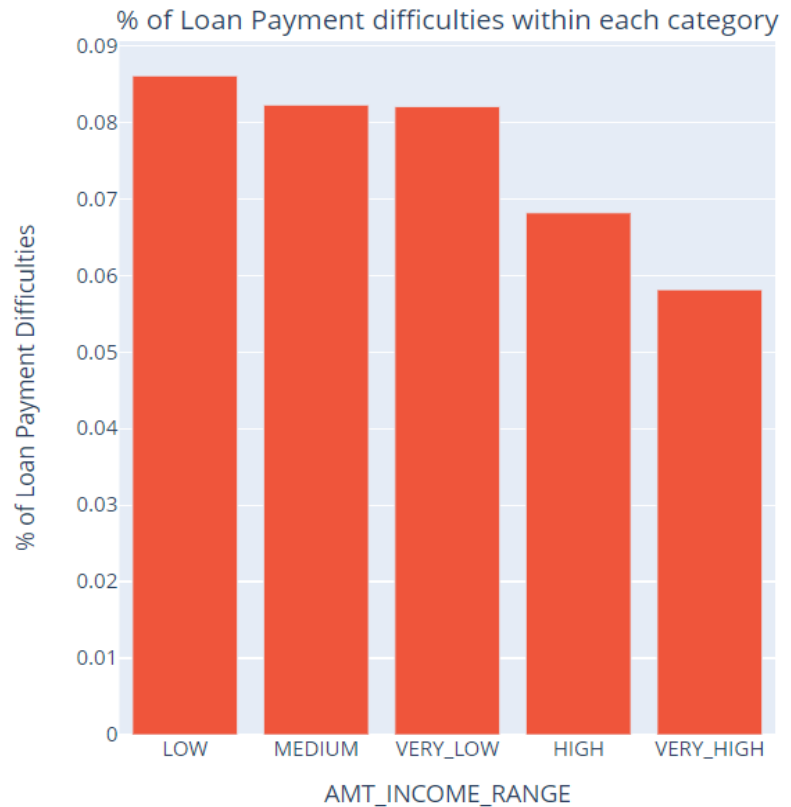
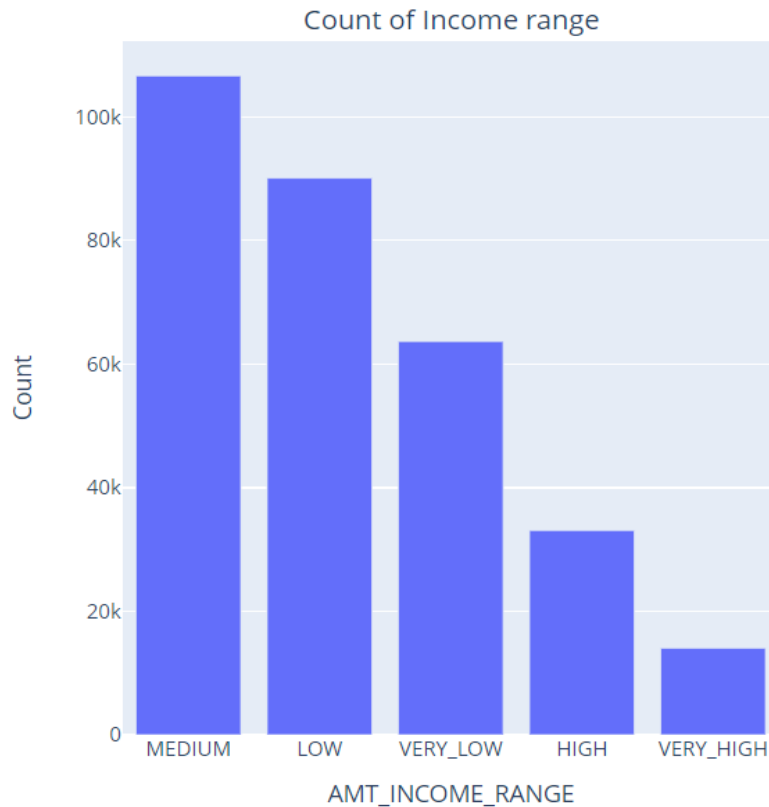
AMT_INCOME_RANGE vs AMT_CREDIT for Loan - Non Payment Difficulties

Income range vs Credit amount of Loan Non- Payment Difficulties



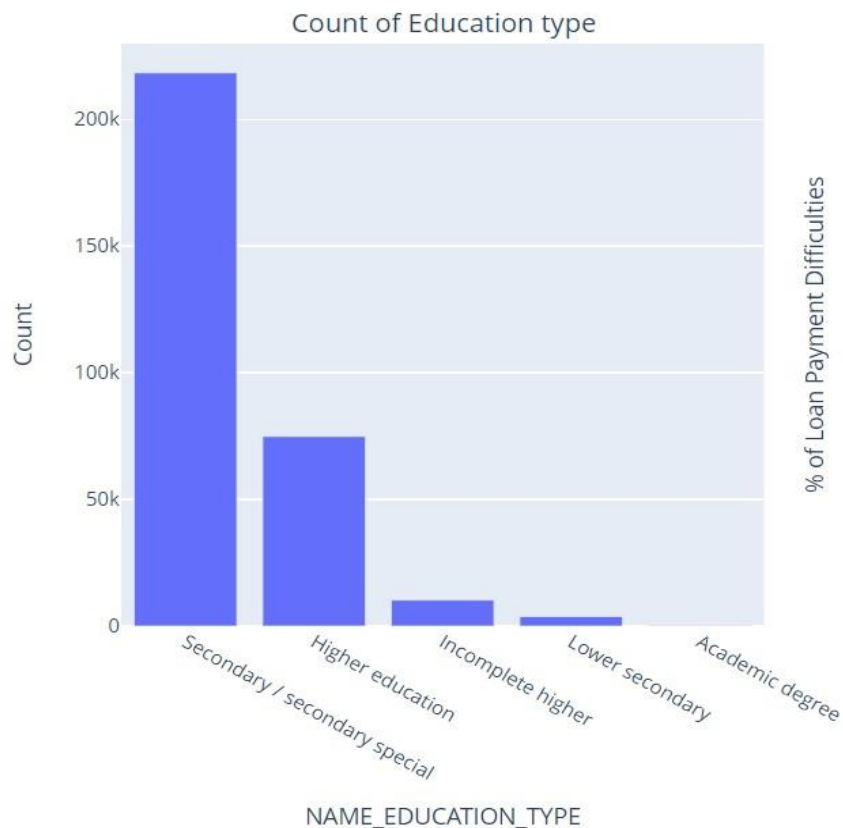
Bivariate Analysis of Categorical-Categorical

Income range

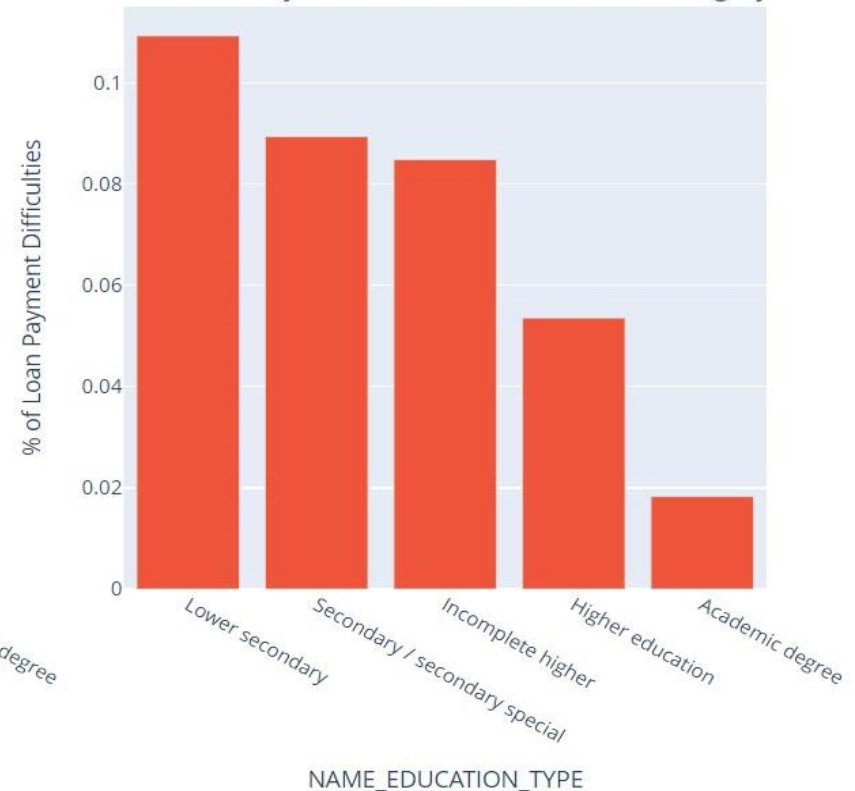


Distribution of Education Type and the category with maximum Loan-Payment Difficulties

Education type

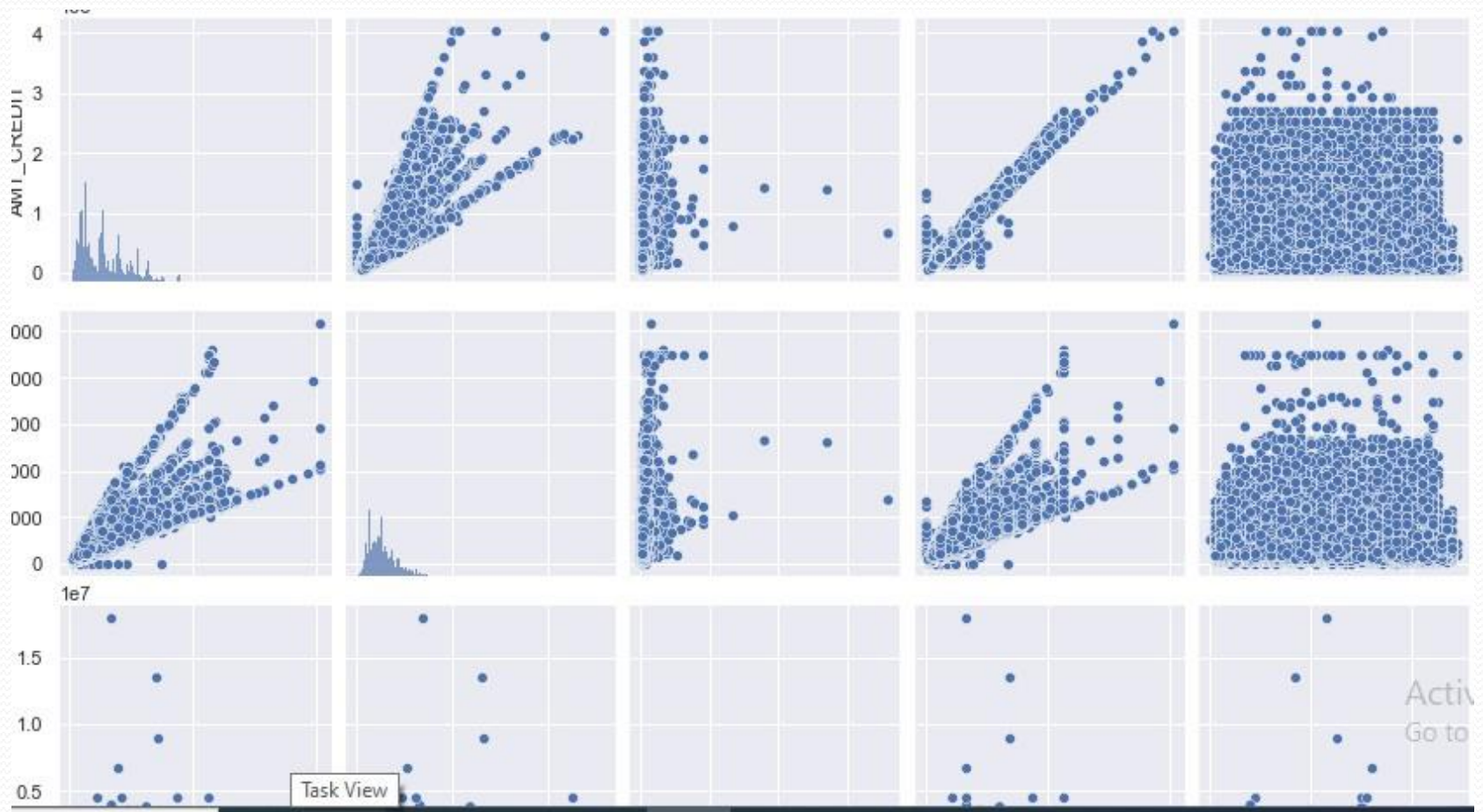


% of Loan Payment difficulties within each category



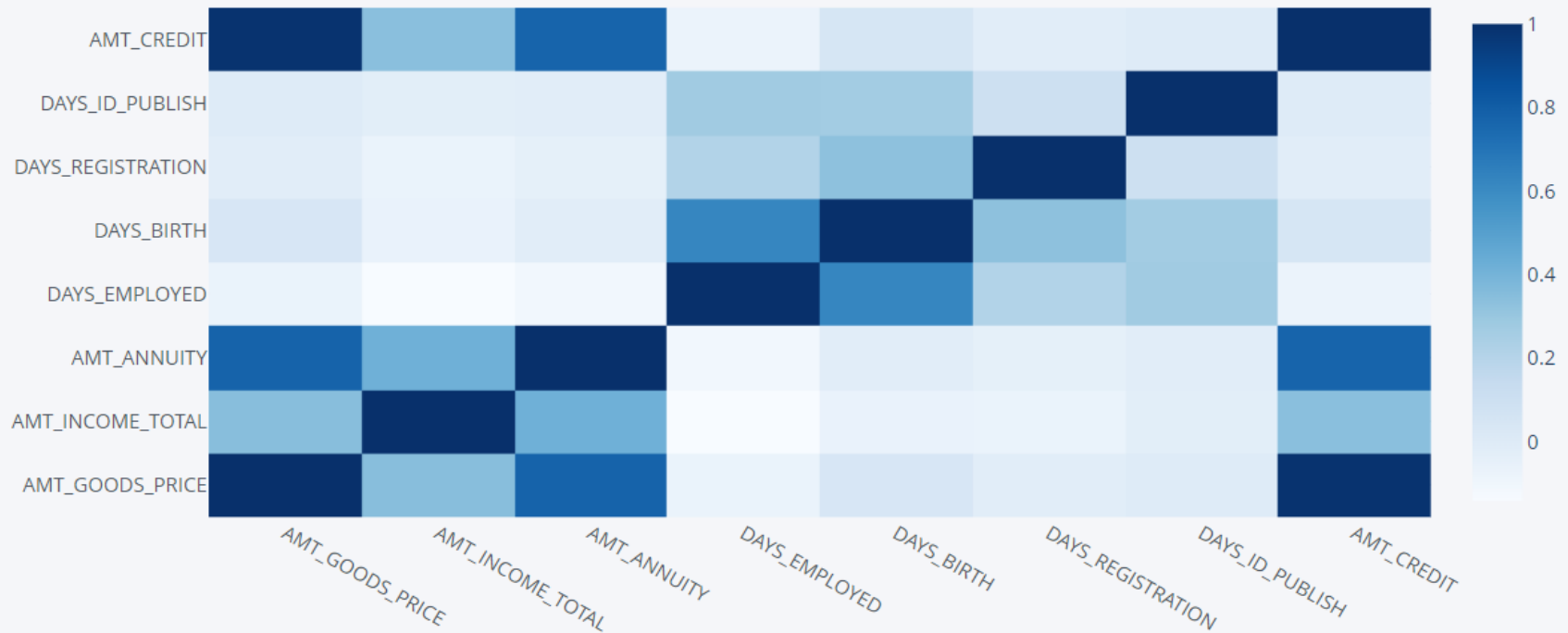
BIVARIATE ANALYSIS

Bivariate Analysis of Numerical vs Numerical Variables



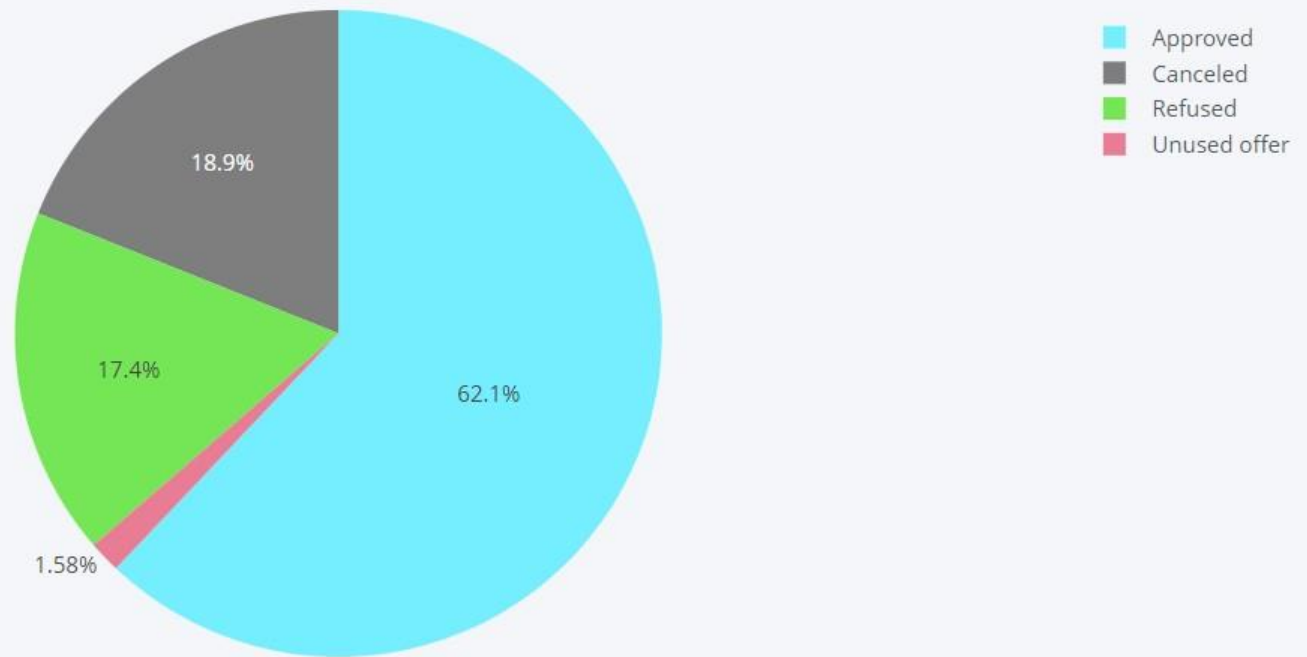
Heatmap for Loan- Non Payment Difficulties

Correlation Heatmap of Loan- Non Payment Difficulties



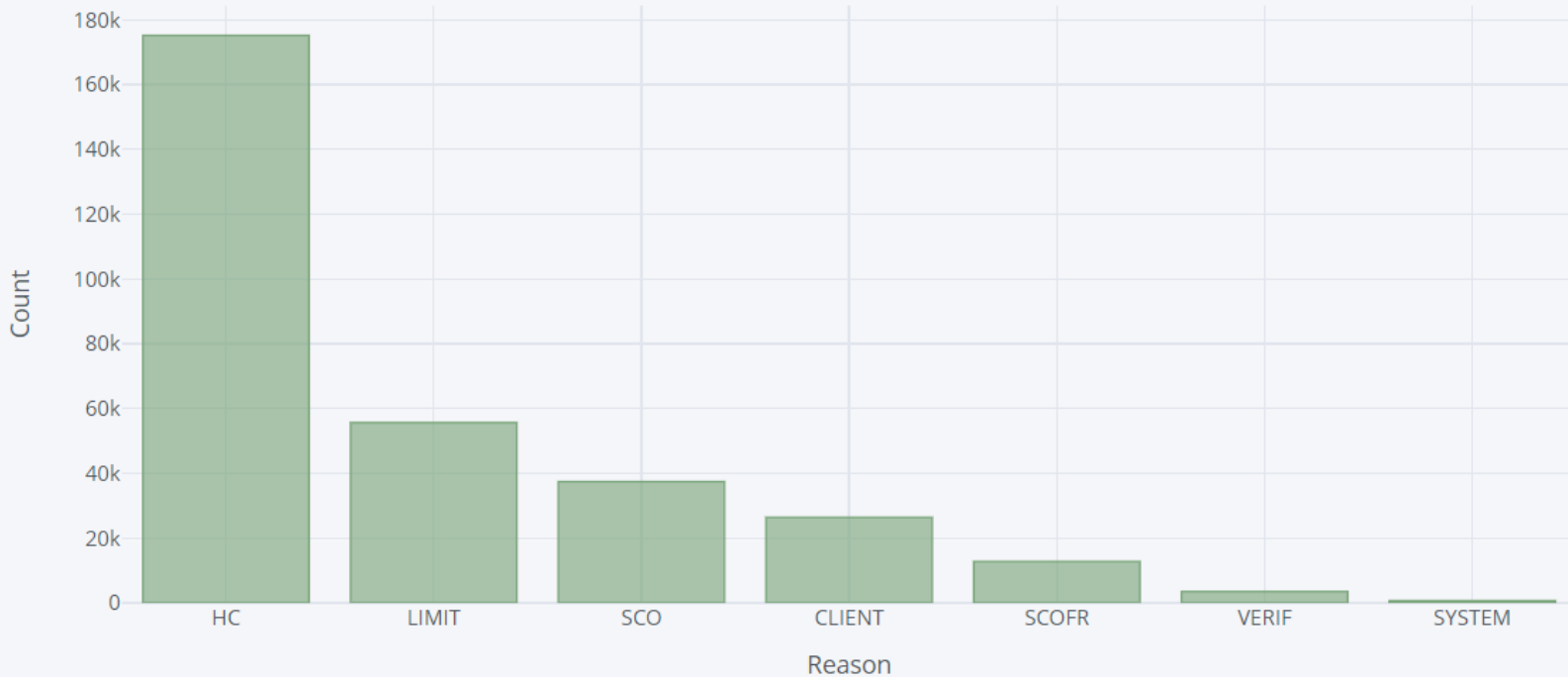
Some Univariate Analysis on previous application data

Contract status of previous application



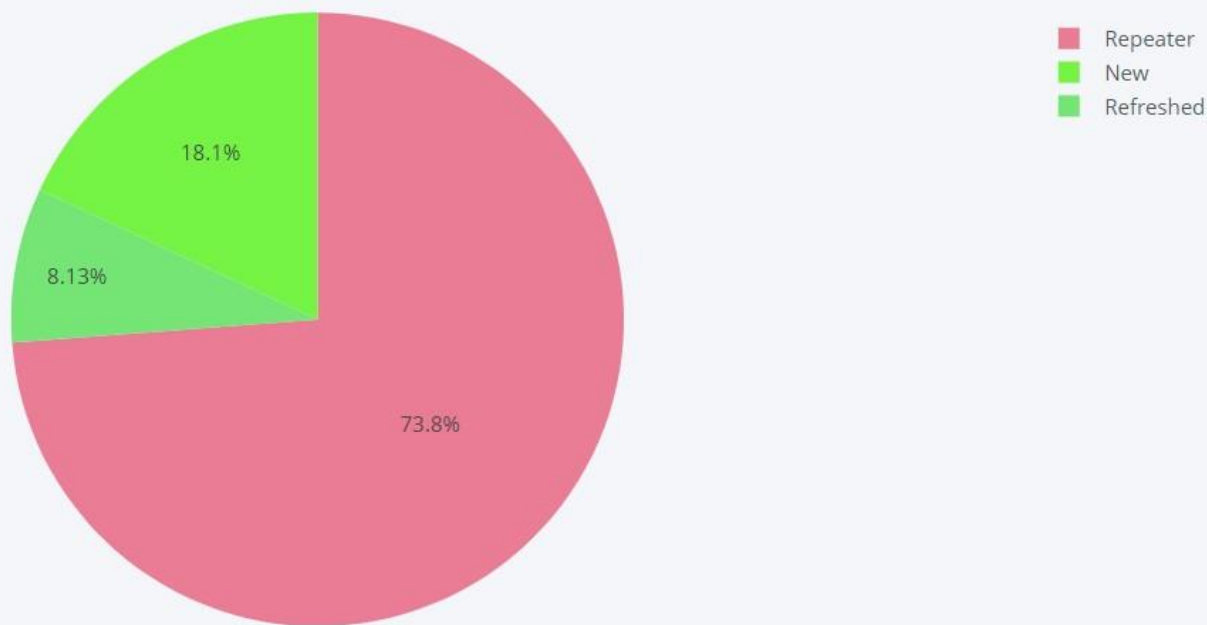
Reasons of previous application rejection

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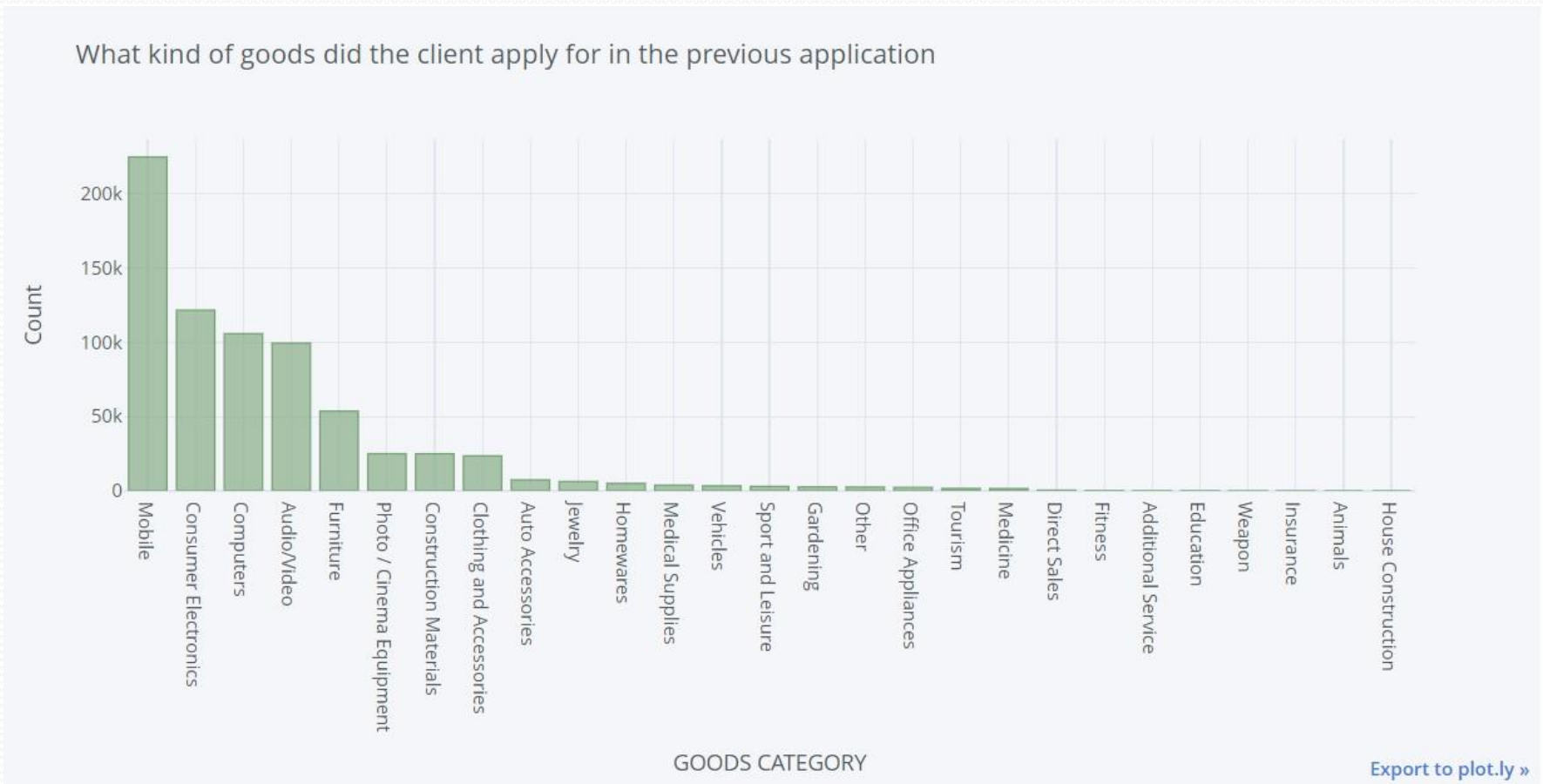


Was the client old or new client when applying for the previous application

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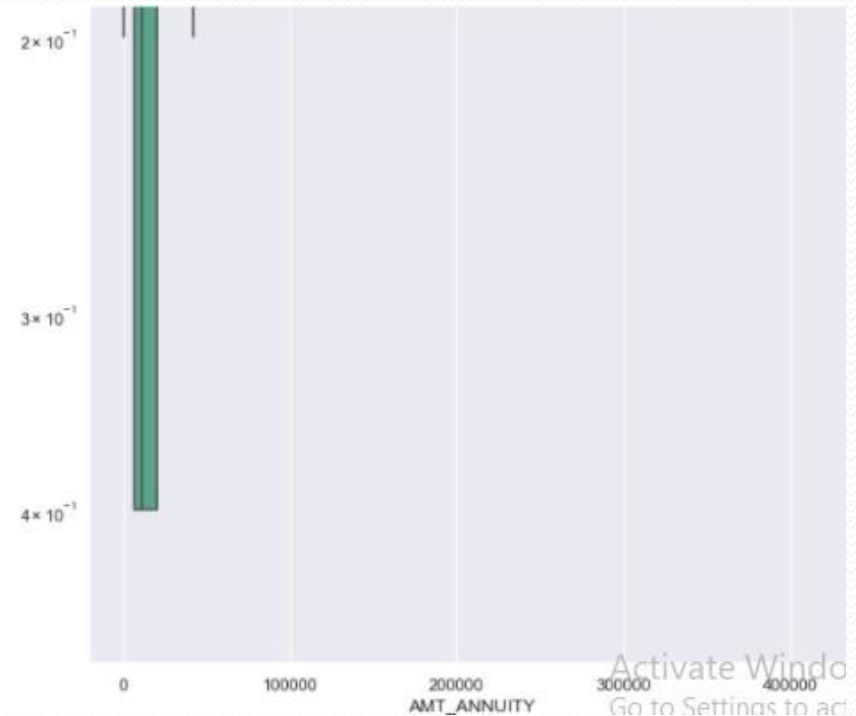
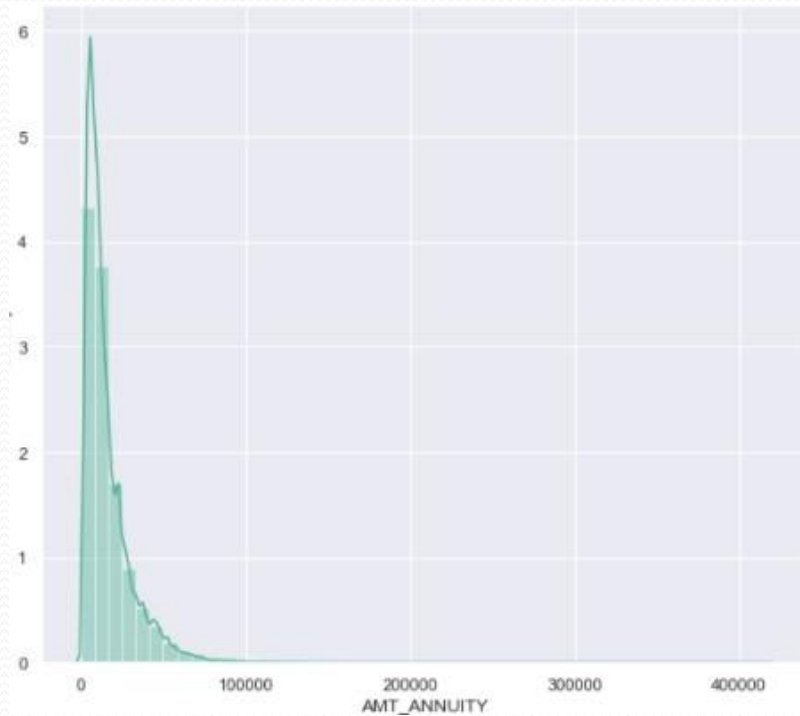
What kind of goods did the client apply for in the previous application



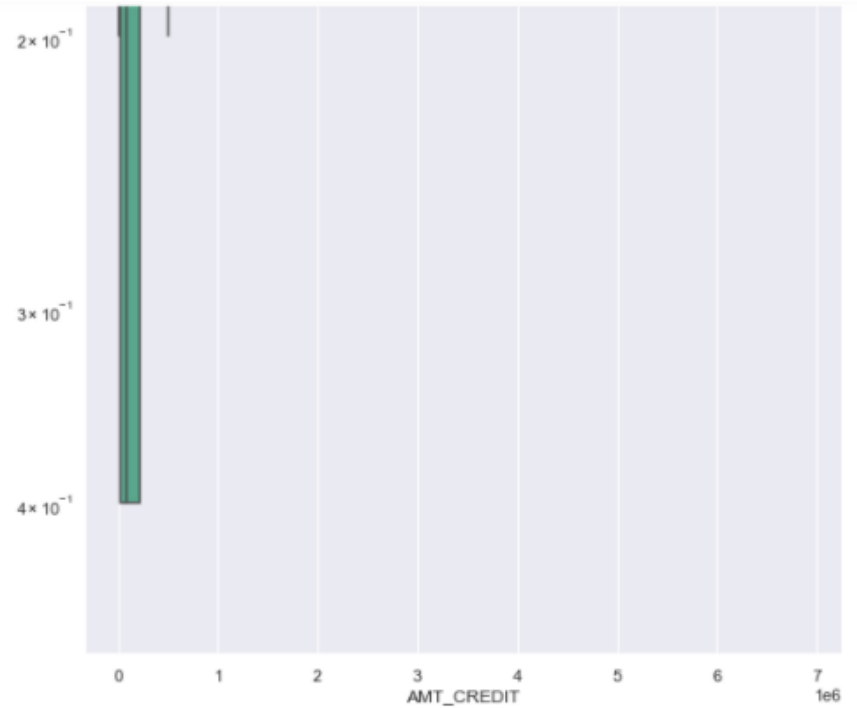
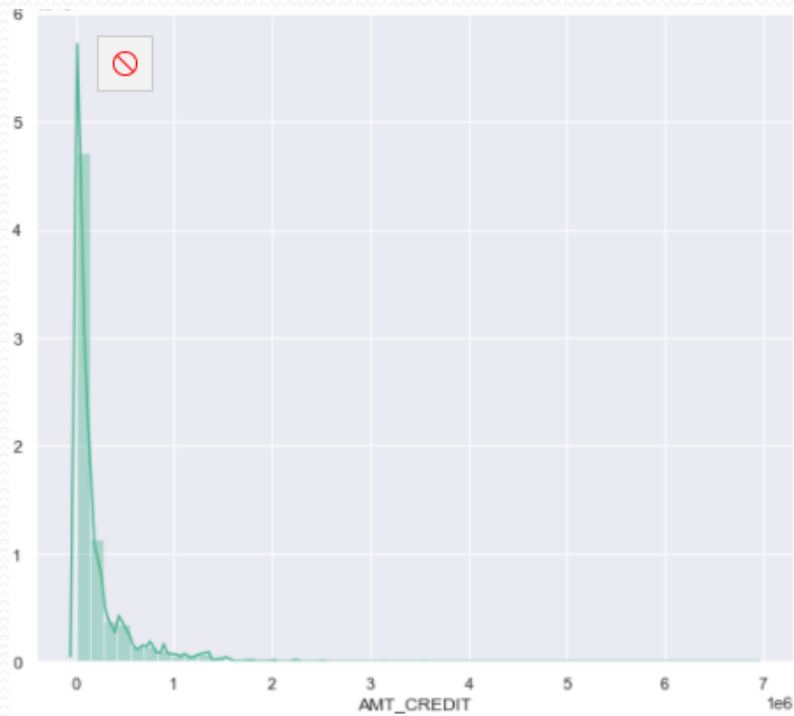
Data Analysis on Previous Application data

Univariate analysis of numerical columns

AMT_ANNUIITY

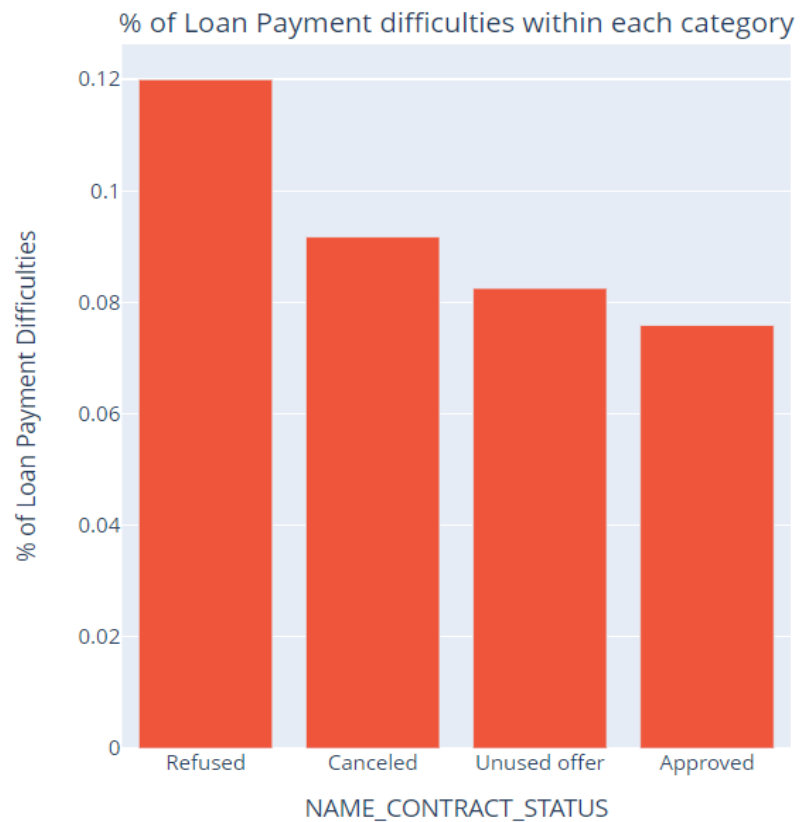
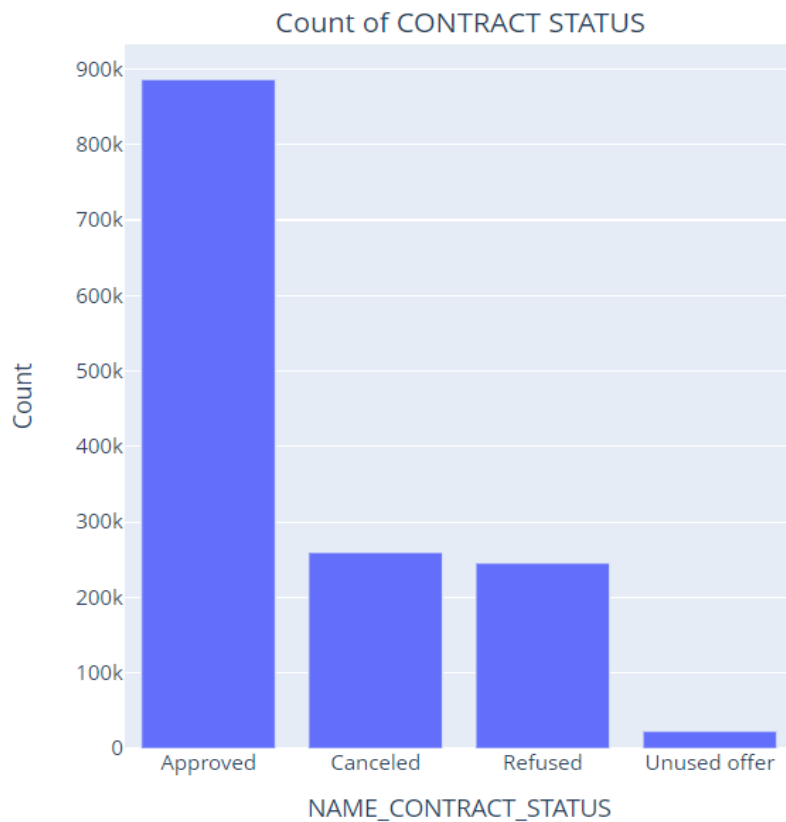


AMT_CREDIT



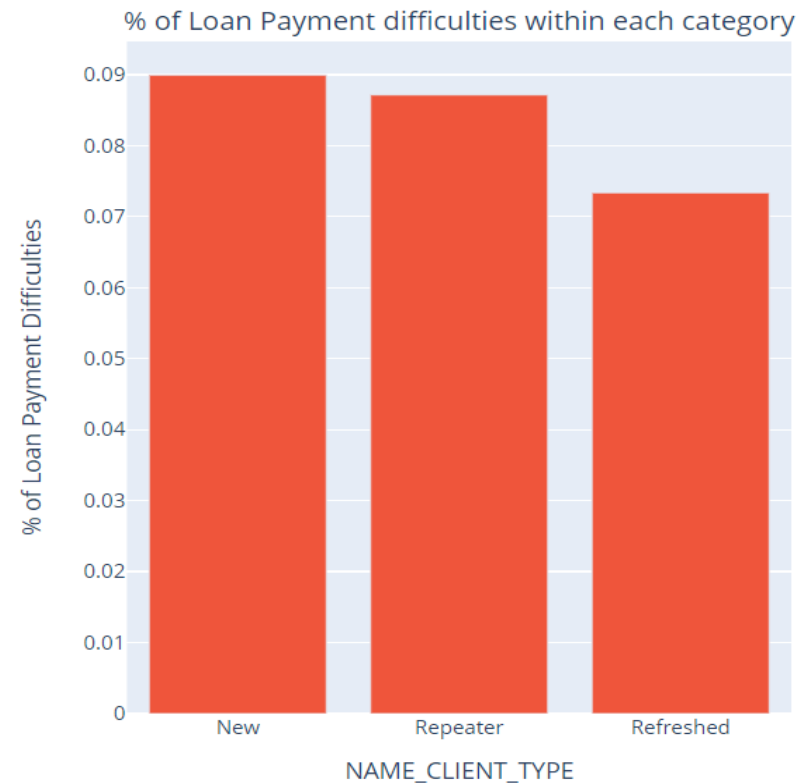
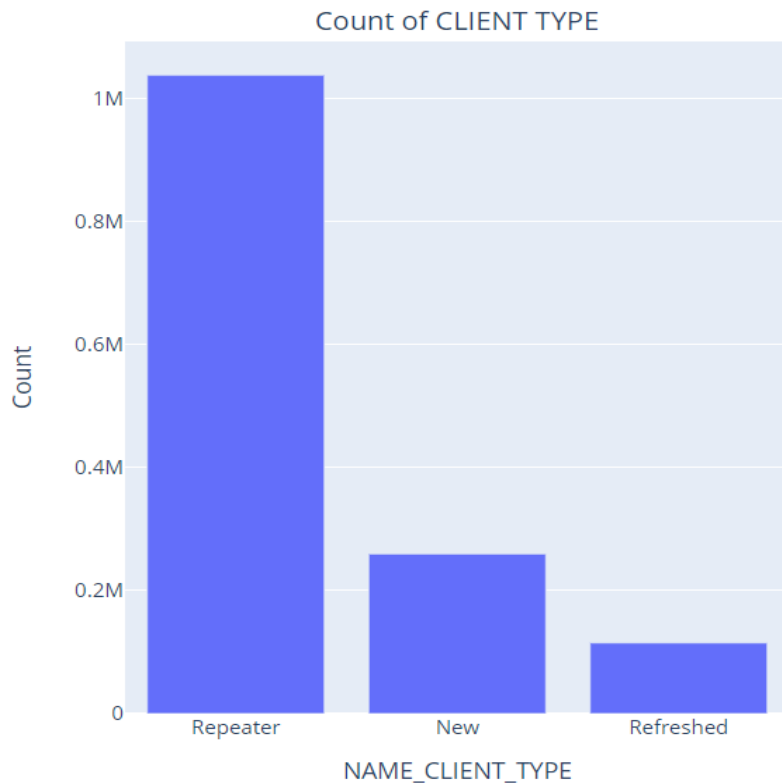
Bivariate analysis after combining previous and current data

CONTRACT STATUS



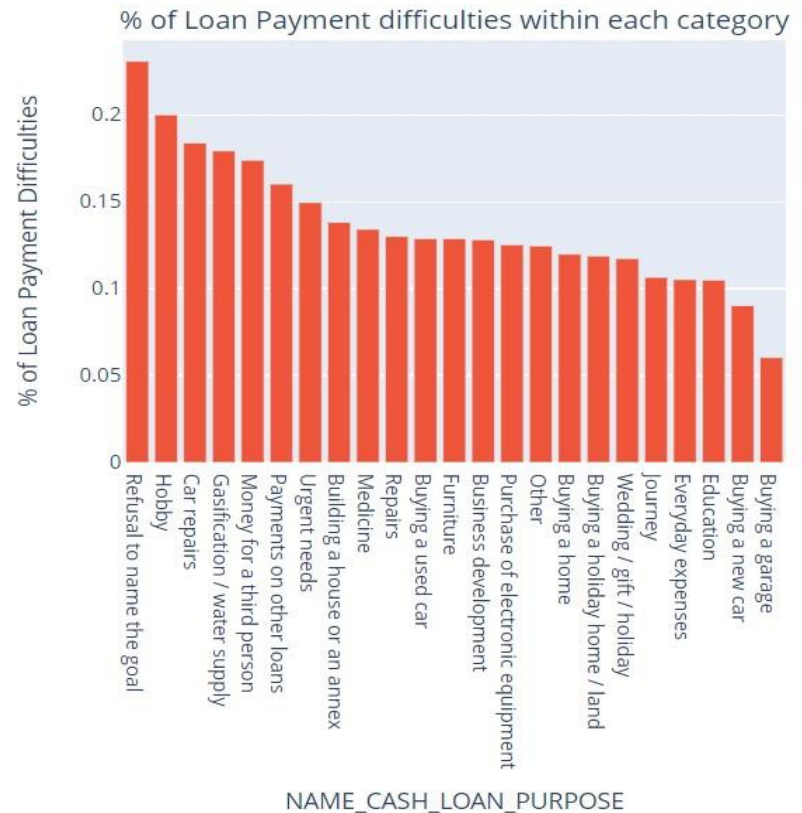
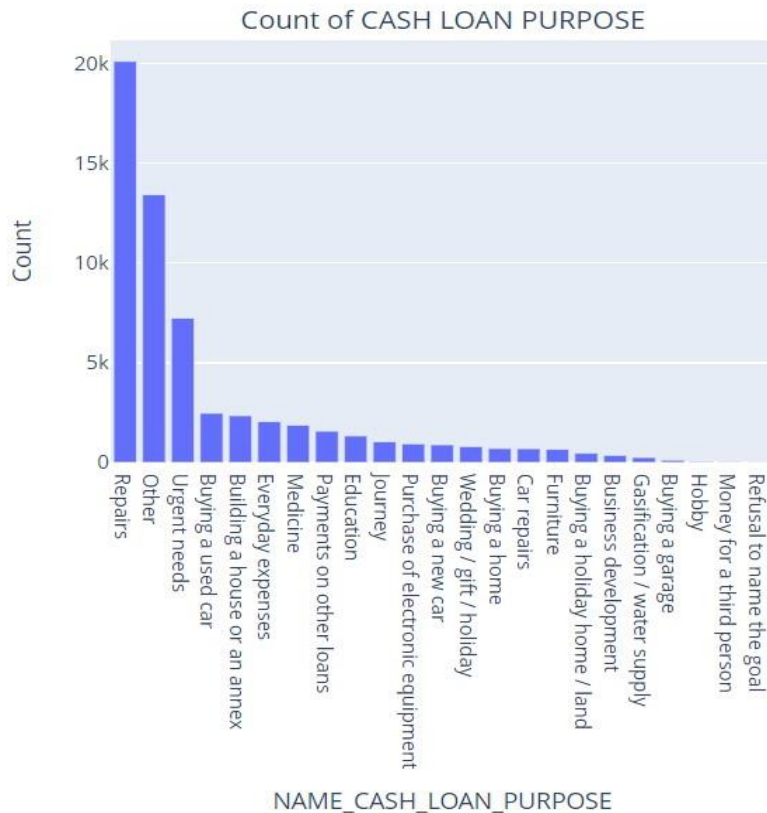
Distribution of Client Type and its category with maximum % of Loan-Payment Difficulties

CLIENT TYPE

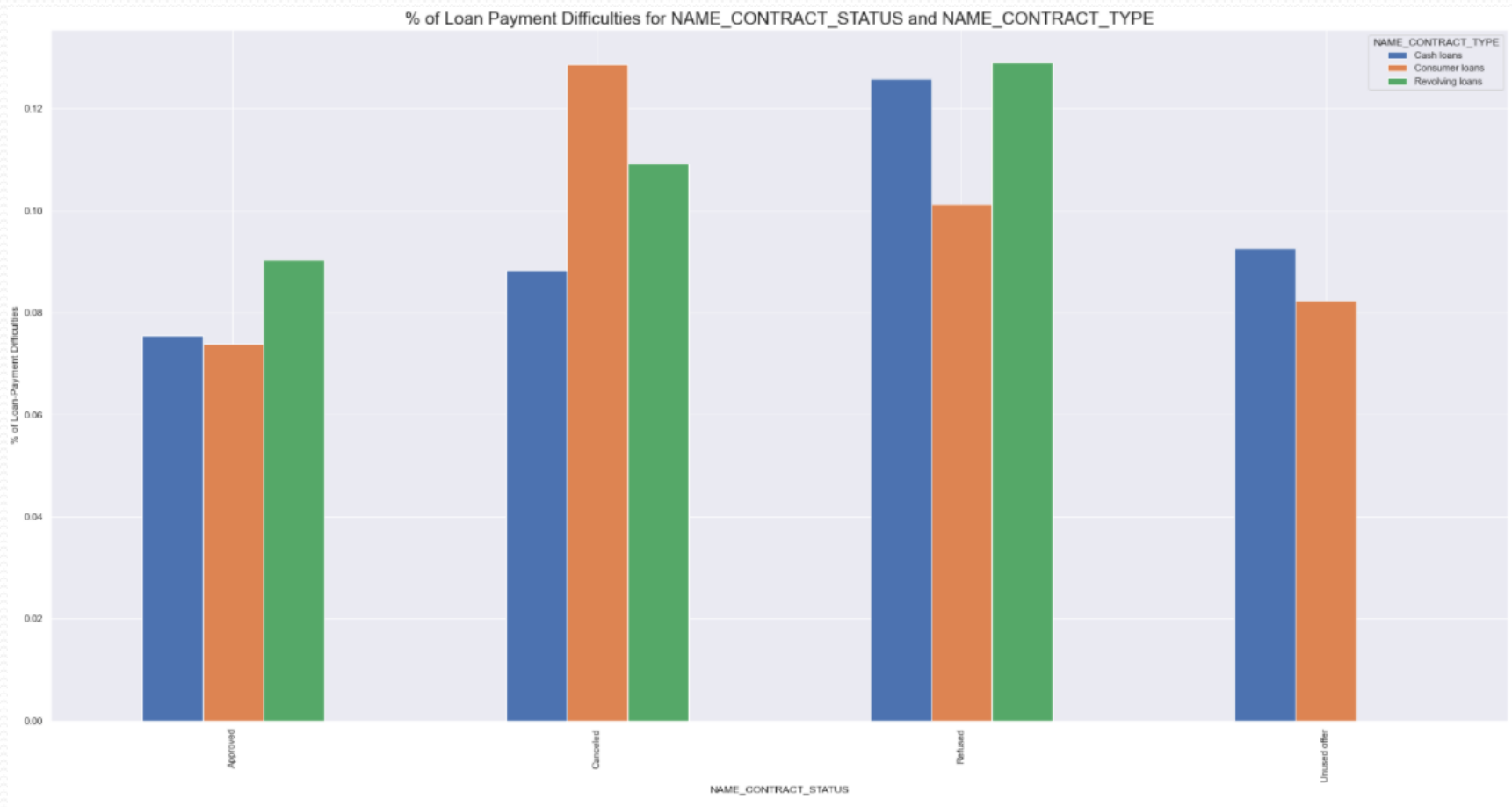


Distribution of Cash Loan Purpose and its category with maximum % of Loan-Payment Difficulties

CASH LOAN PURPOSE



% of Loan Payment Difficulties for NAME_CONTRACT_STATUS and NAME_CONTRACT_TYPE





Thank You