Credit EDA Case Study

By

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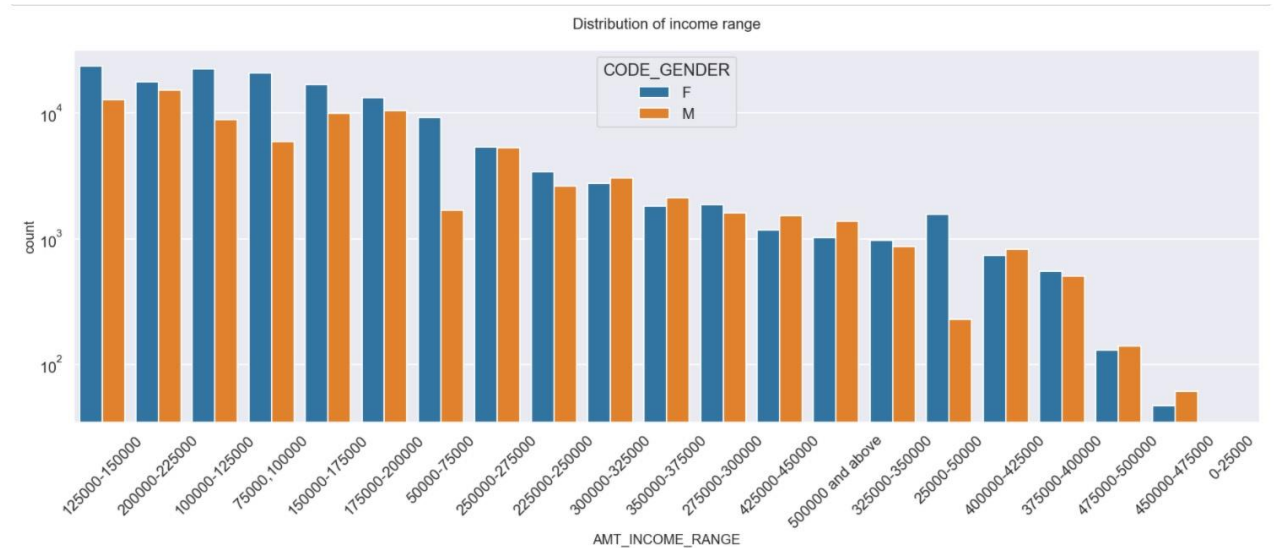# Categorical Univariate Analysis for Target 0

Distribution of income range

Female count is higher than male

Income Range from 100000 to 200000 is having more number of credits

This graph shows that females are more than male in having credits for that range

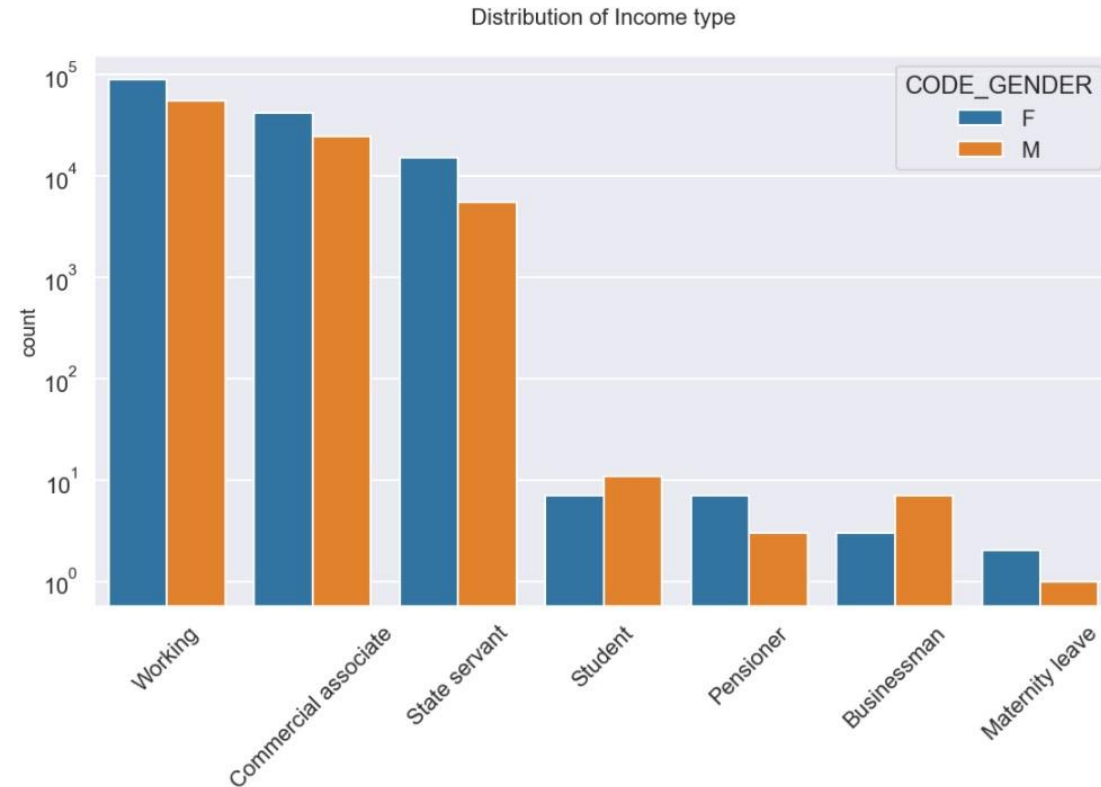Very less count of income range 400000 and above.

Distribution of income type

For income type 'Working' , 'commercial associate' and 'State Servant' the number of credits are higher than others

For this females are having, more number of credits than male.

Less number of credits for income type 'Student' , 'Pensioner' , 'Businessman' and 'Maternity Leave'.

Distribution of Income type

Distribution for contract type

For contract type 'Cash loans' is having higher number of credits than 'Revolving loans' contract type.

For this also Female is leading for applying credits

Distribution of contract type
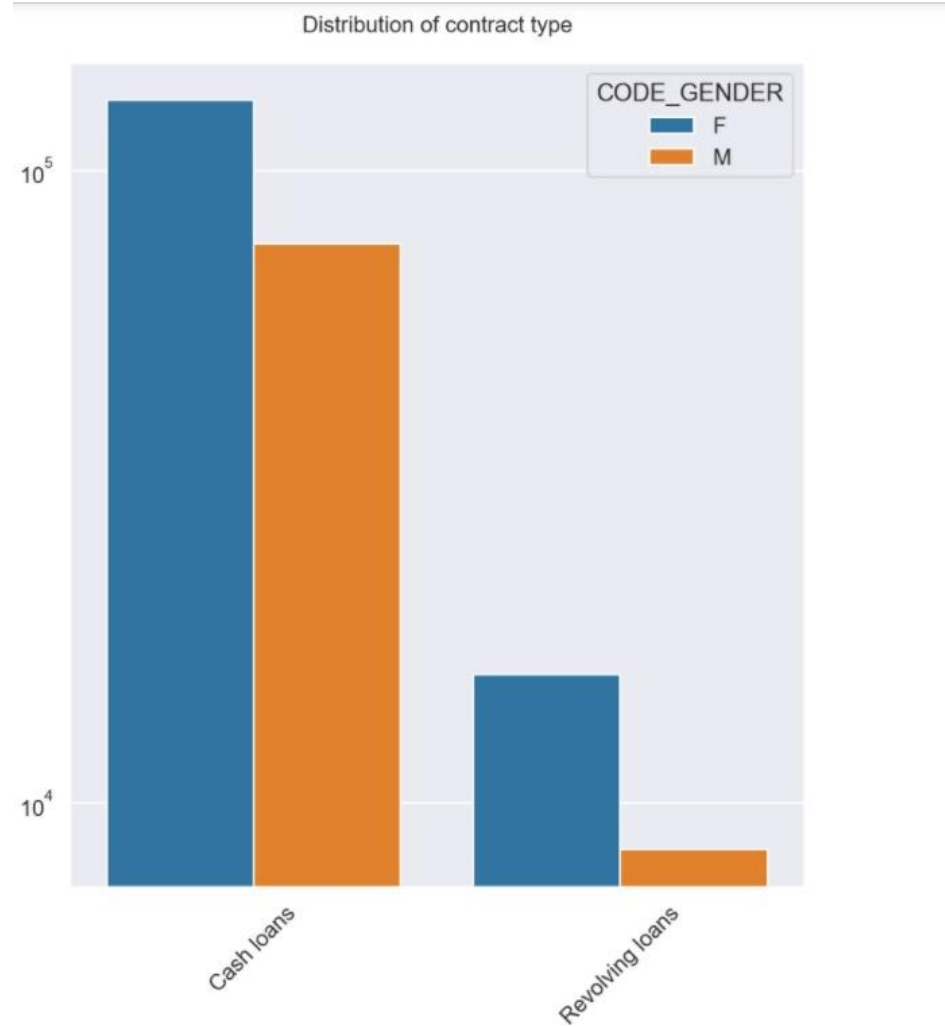
Distribution of organization type

Clients which have applied for credits are from most of the organization type 'Business entity Type 3' , 'Self employed' , 'Other' , 'Medicine' and 'Government'

Less clients are from industry type 8, 6 and 10, religion and trade type 5 and 4

Distribution of Organization type for target - 0
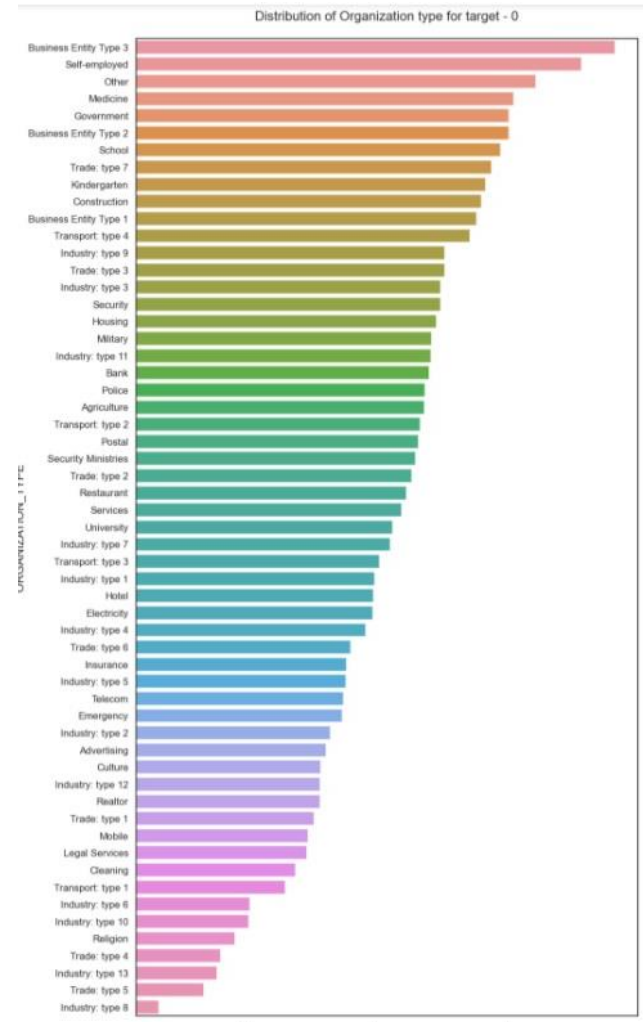
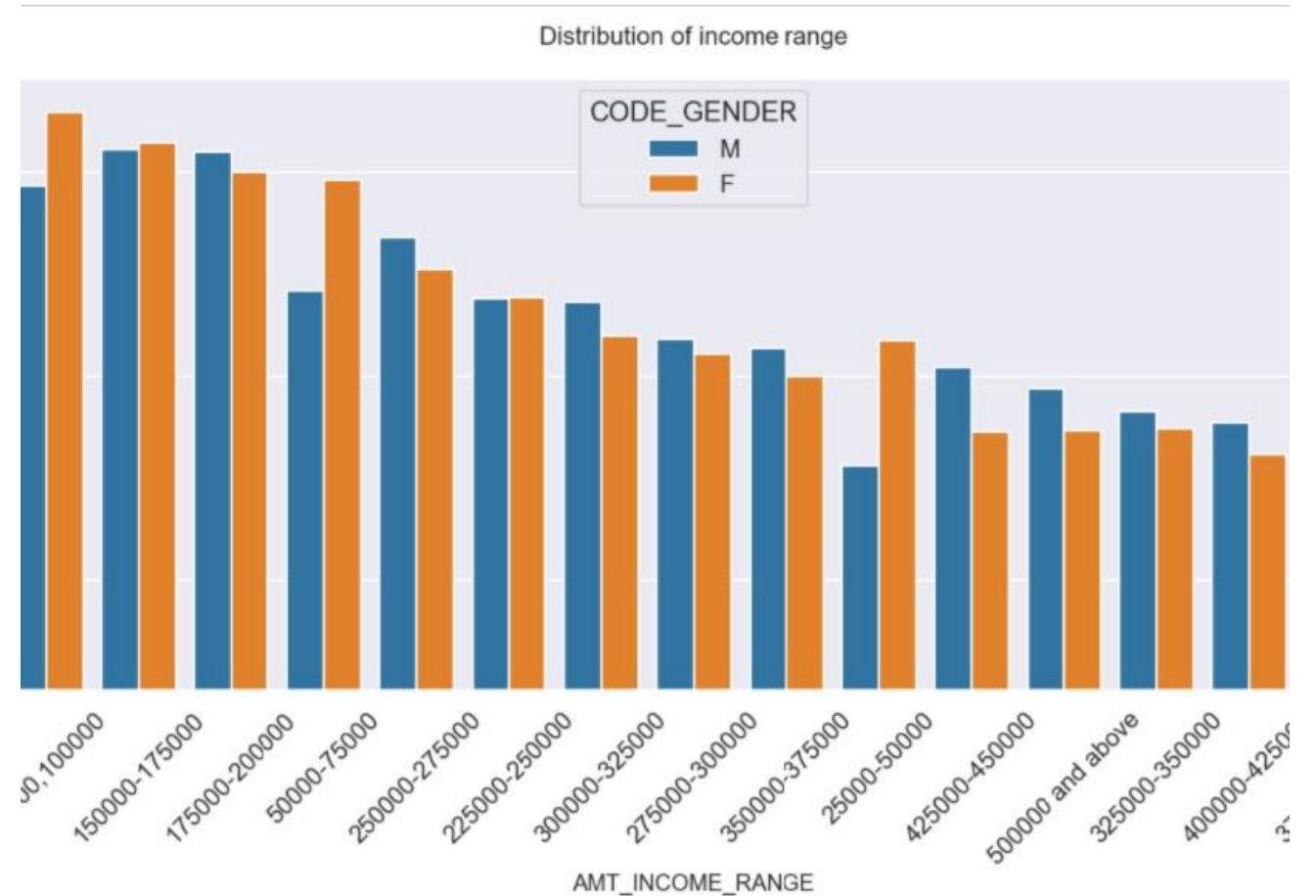# Categorical Univariate Analysis for Target 1

Distribution of Income Range

Male counts are higher than female

Income range from 100000 to 200000 has more credits.

The graph shows that male are more than females in having credits for that range.

Very less range for income range 400000 and above.

Distribution of income range

Distribution of income type

For income type 'Working', 'Commercial associate' and 'State Servant' the number of credits are higher than other i.e. 'Maternity Leave'

For this females having credit more than males.

Less number of credits for income type 'maternity leave'.

For type 1 there is no income type for 'student' , 'pensioner' and 'Businessman' which means they don't do late payments.
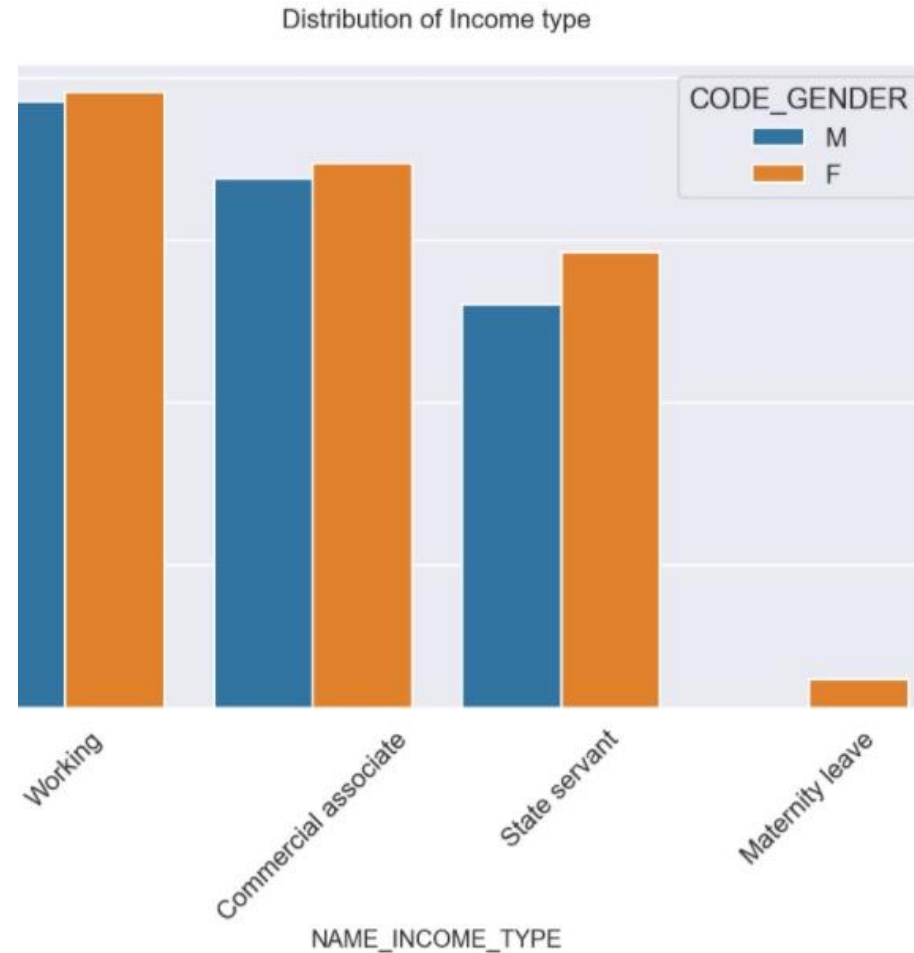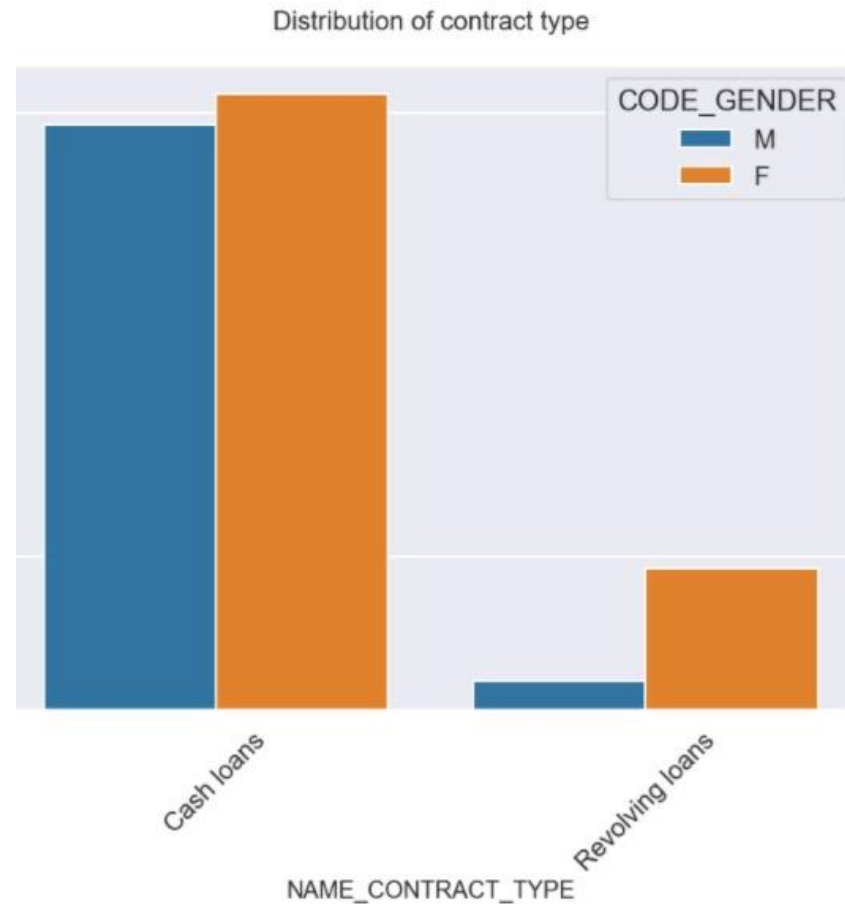

Distribution of Income type

Distribution for contract type

For contract type 'cash loans' is having higher number of credits than 'Revolving loan'.

For this also female is leading for applying credits

For type 1 there is only female revolving loans.

Distribution of contract type

Distribution of Organisation type

Clients which have applied for the credits are from most of the organization type 'Business entity Type 3' , 'Self employed' , 'Other' , 'Medicine' and 'Government'.
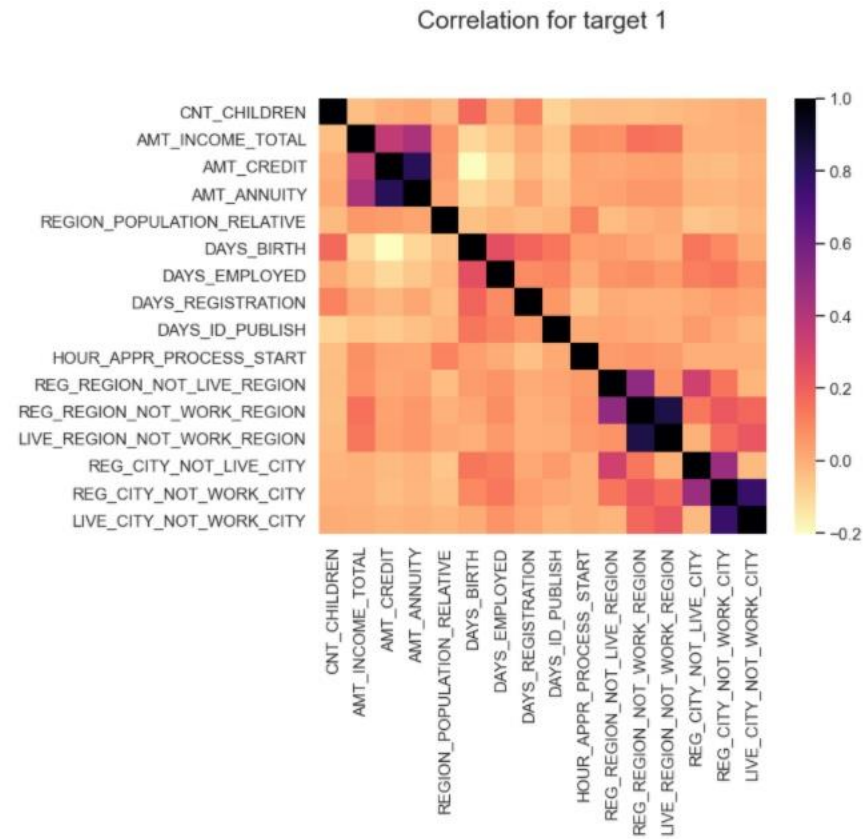
Less clients are from industry type 8, 6, 10, religion and Trade type 5 and 4.
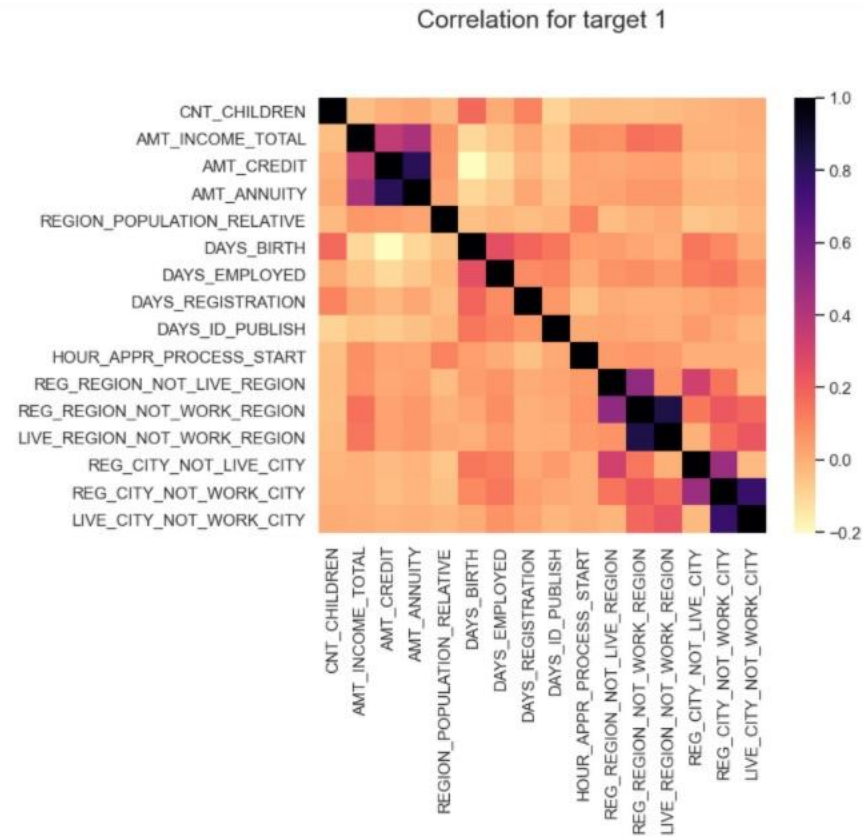
Same as type 0 in organization type.

Distribution of Organization type for target - 1
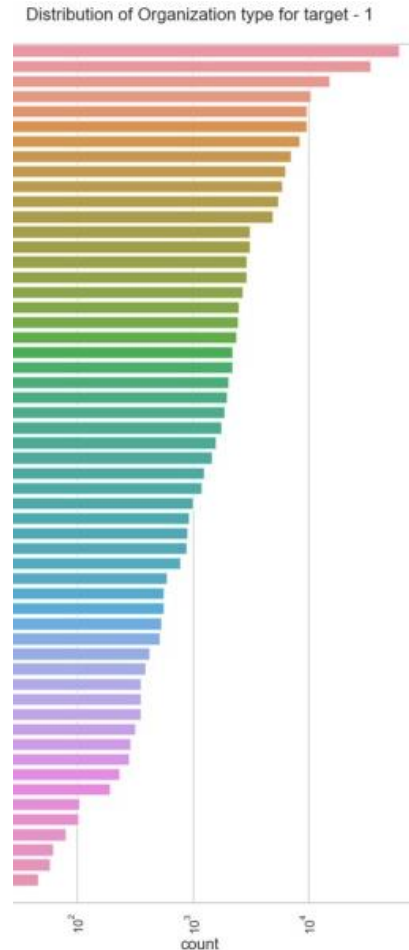
Correlation of target 0

Correlation Target 0

Correlation for target 1

Correlation Target1
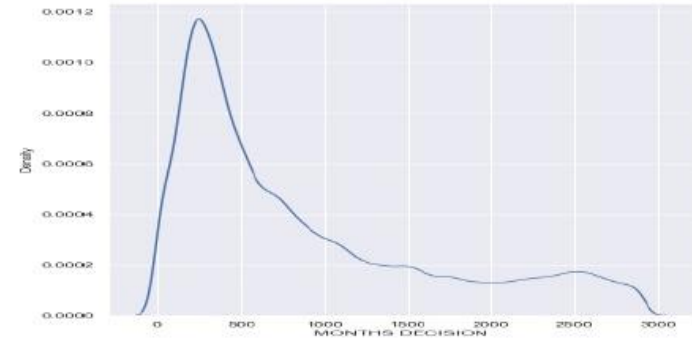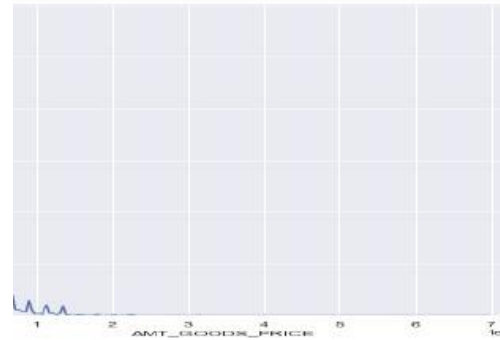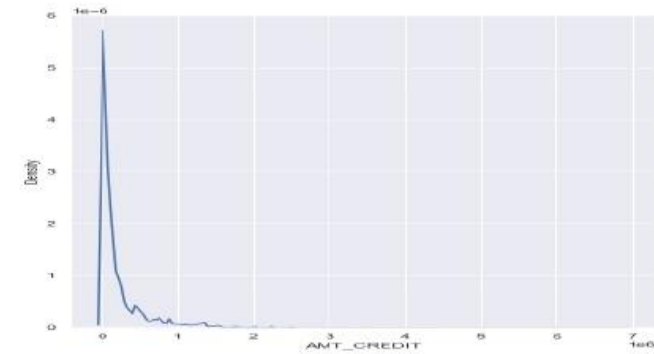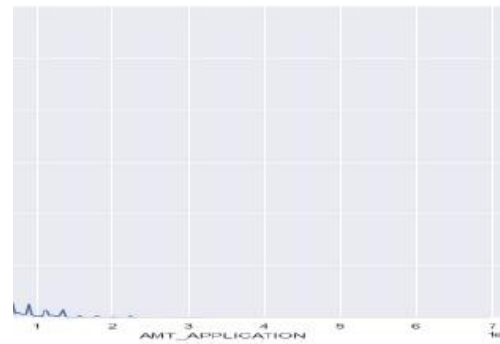

Correlation for target 1

Categorical univariate for variables

Boxplot for income variable

Some outliers are noticed in the income amount

Bivariate analysis for Type 0

Credit vs Education

Family status of 'Civil marriage' , ' marriage and 'separated' of academic degree education have higher credits than others.

Higher education of family status of 'marriage' , 'single' and 'Civil marriage' have more outliers.

Civil Marriage for academic degree is having most of the degree in third quartile.


Credit amount vs Education Status
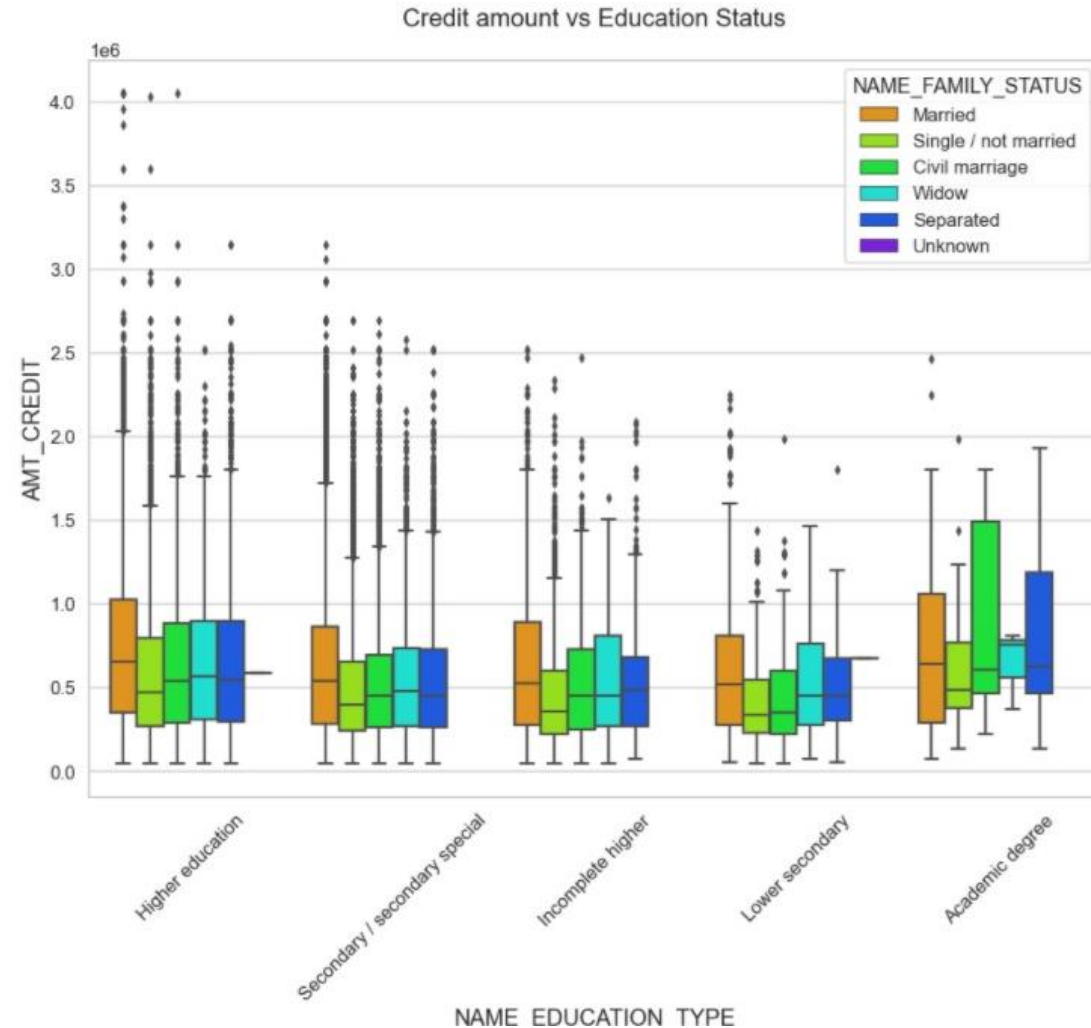
Income vs Education status

For Higher education the income amount mean is mostly equal with family status. Has no outliers

Less outliers for academic degree but income is little higher than Higher education.

Lower secondary of civil marriage family status have less income amount than ohers.

Credit amount vs Education Status
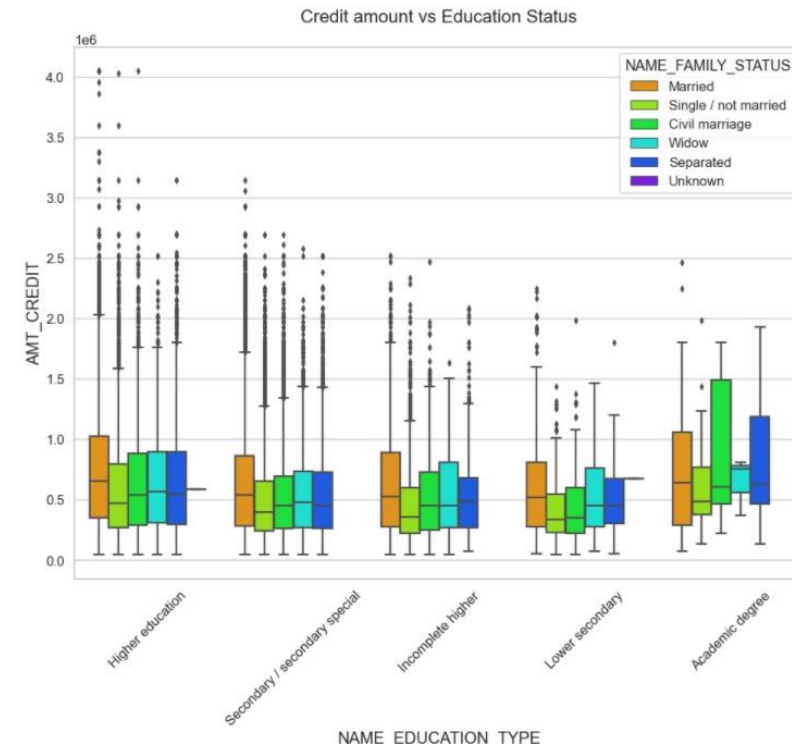
Univariate anaylsis for merging previous data

Contract status with purpose
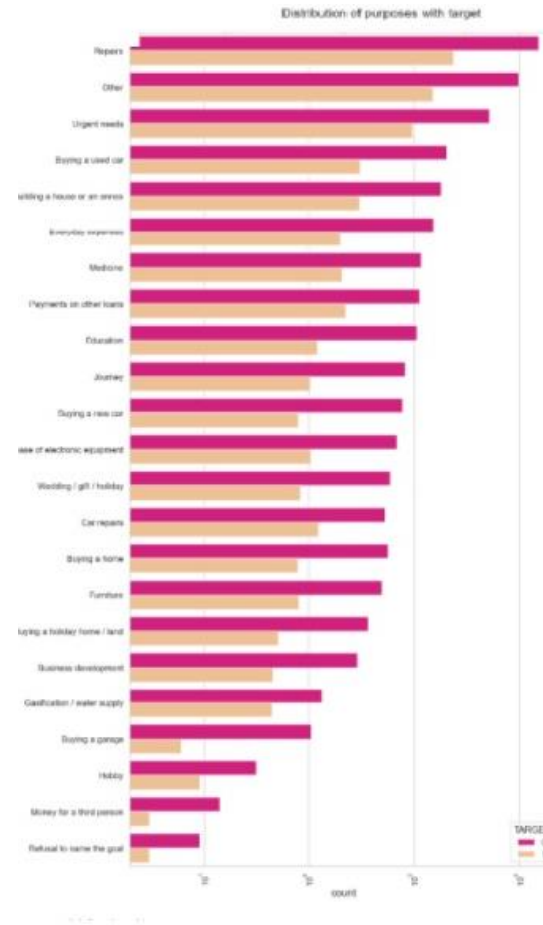
Most rejection loans came from repairs.

For education purpose we have equal number of approves and rejections.

Paying other loans and buying a new car is having significant higher rejections than approves
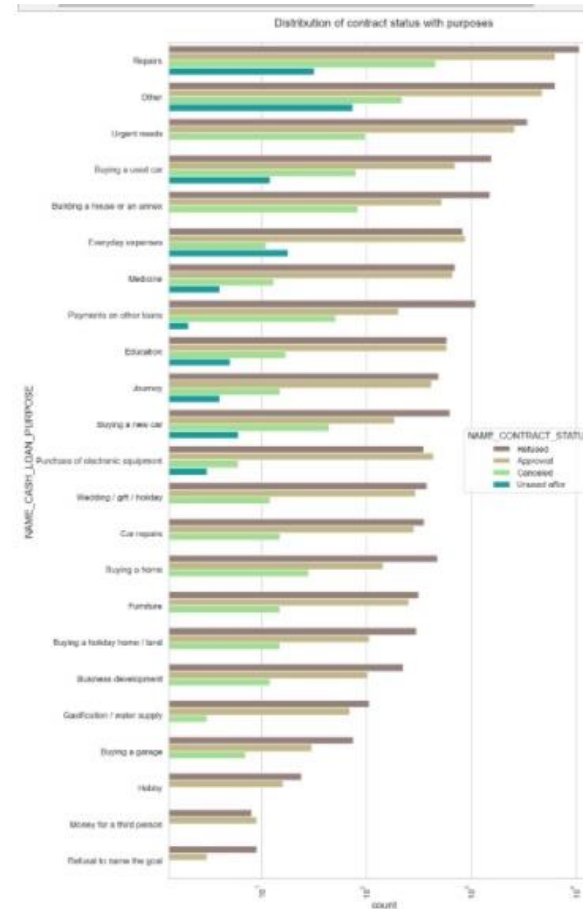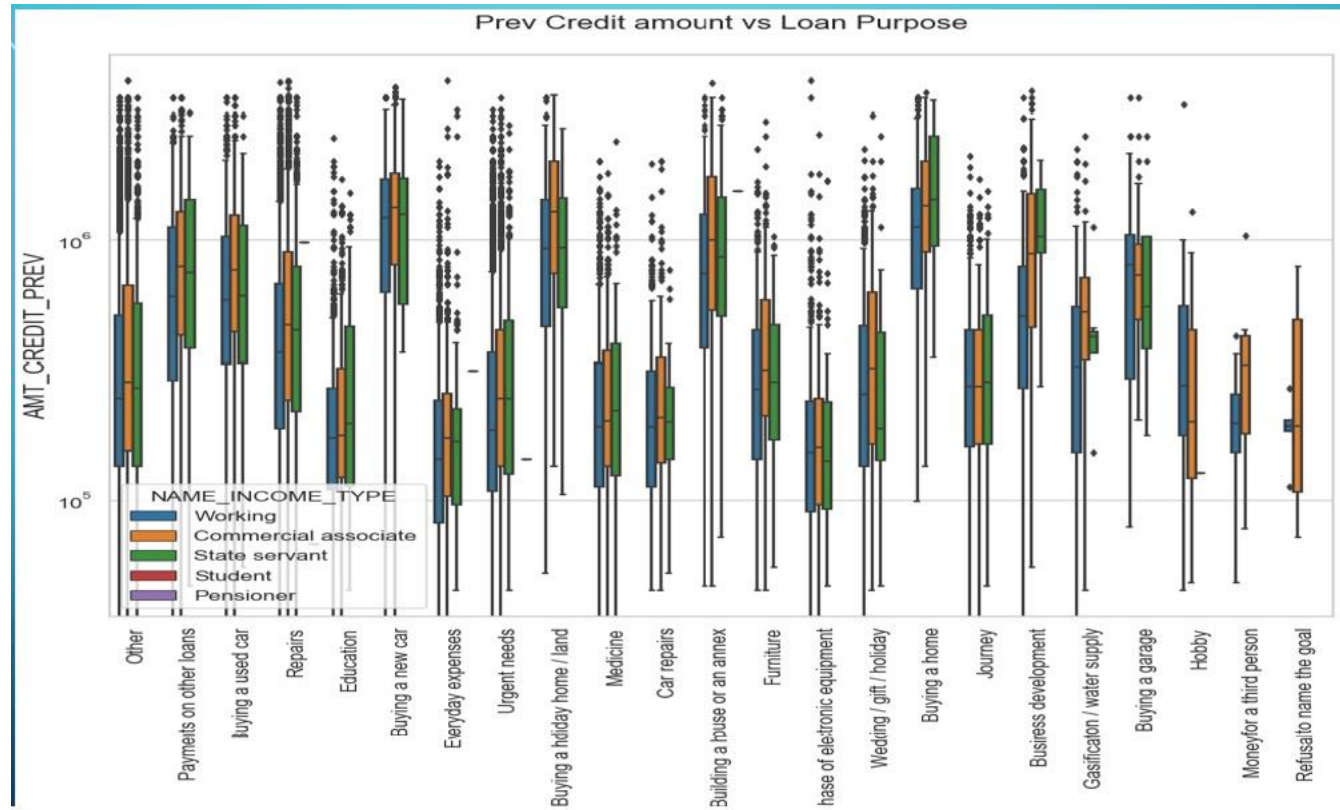
Ditribution Purpose with Target

Loan purpose with repairs are facing more difficulty

Perform Bivariate analysis

Previous credit amount versus loan purpose

Prev Credit amount vs Loan Purpose

Previous cred amount vs loan purpose

Income type of servants have significant credit applied

Money for third person or hobby has less credit.

Conclusion

Focus more on Student pensioner and businessman with housing type other than Co op apartment for successful payment

Focus less on income type working as less successful payments

Conclusion

Repair has higher unsuccessful repayments

Clients with housing type 'With parents' have least unsuccessful payments