CREDIT EDA CASE STUDY

- VENKAT REDDY

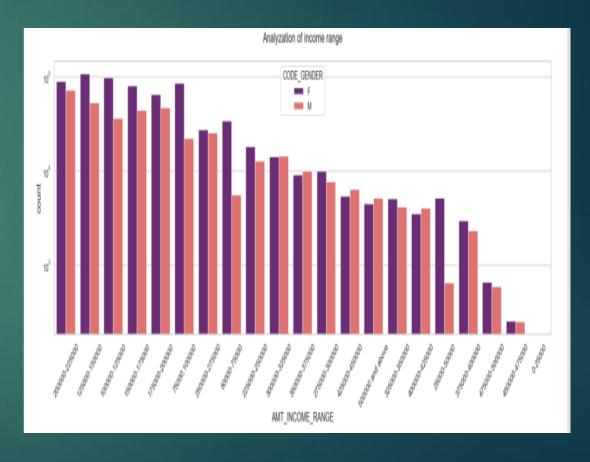


• As we observe the count of female is more than male.

• The income range of 125000 - 150000 has more credits.

• The least count of credits is found in income range of 450000 - 475000.

ANALYSIS OF INCOME RANGE

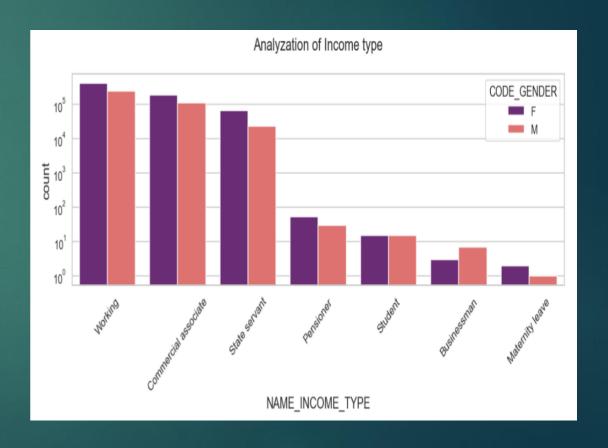


• For income type 'working', 'commercial associate', and 'State Servant' the number of credits are higher than others.

• And Females are having more number of credits than male for above mentioned income type.

• Less number of credits for income type 'student', 'pensioner', 'Businessman' and 'Maternity leave'.

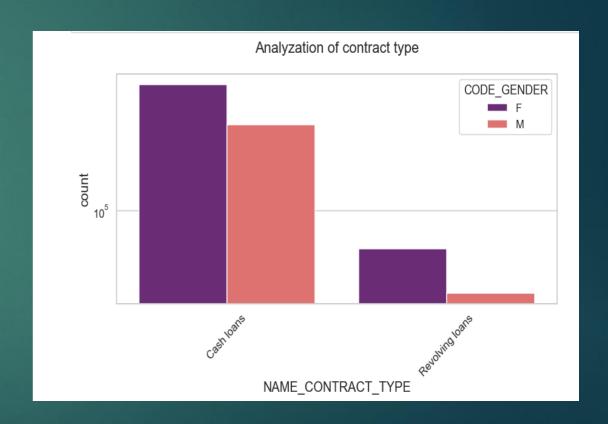
ANALYSIS OF INCOME TYPE



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

• Female has highest count for credits.

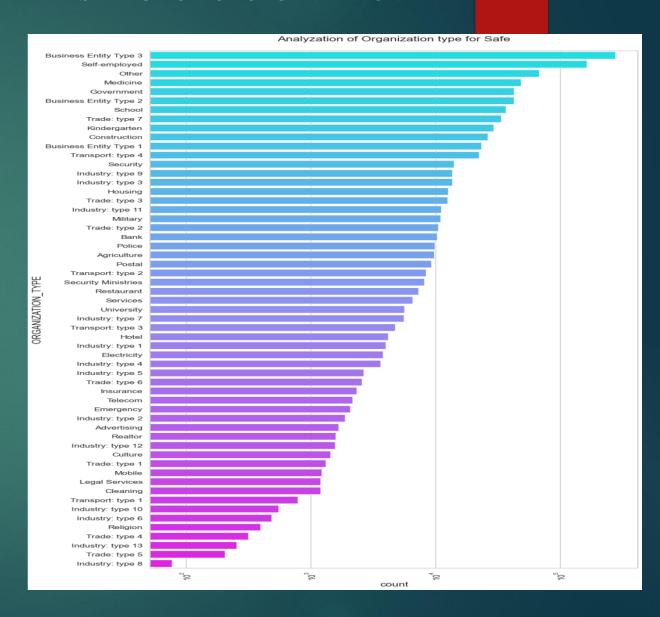
ANALYSIS OF CONTRACT TYPE



• Clients 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, type 6, type 10, religion and trade type 5, type 4.

DISTRIBUTION OF ORGANIZATION TYPE

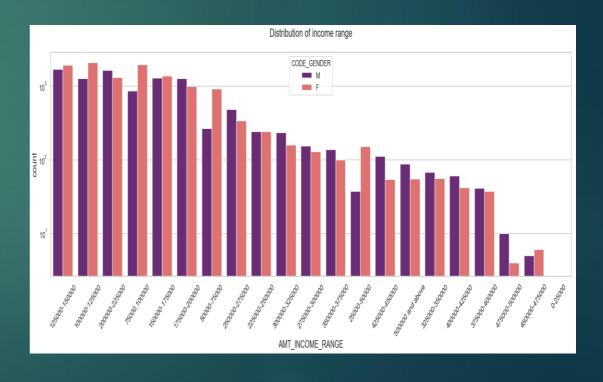


CATEGORIAL UNIVARIATE ANALYSIS FOR TARGET 1

• Male count is higher than female.

• The income range of 100000 - 125000 shows highest male credit count.

ANALYSIS OF INCOME RANGE

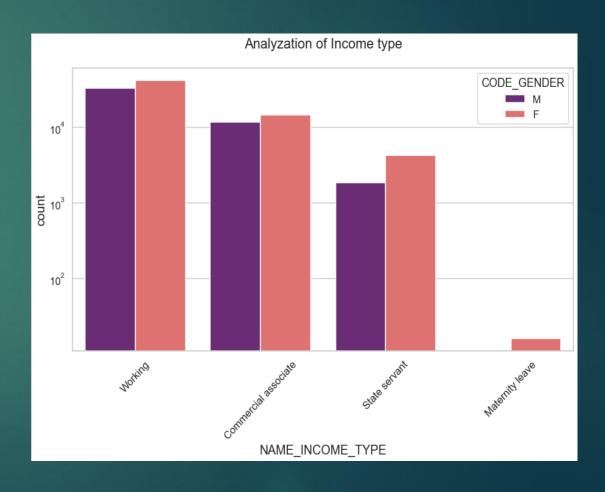


• For income type 'working', 'commercial associate', and 'State Servant' the number of credits are higher than other i.e. 'Maternity leave.

• Females are having more number of credits than male.

Less number of credits for income type 'Maternity leave'

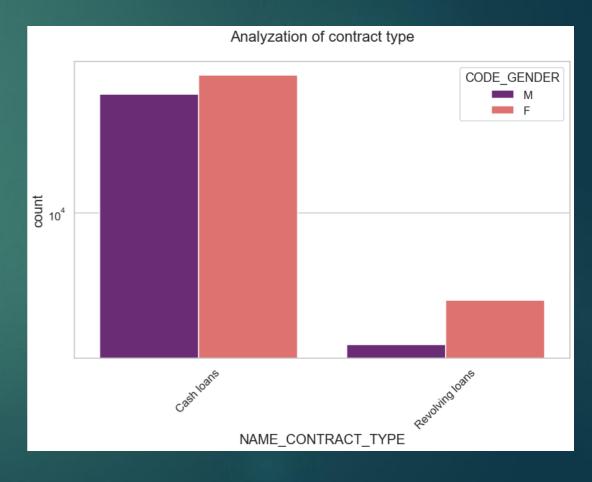
ANALYSIS OF INCOME TYPE



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

As we observe for revoking loan there male count is very less

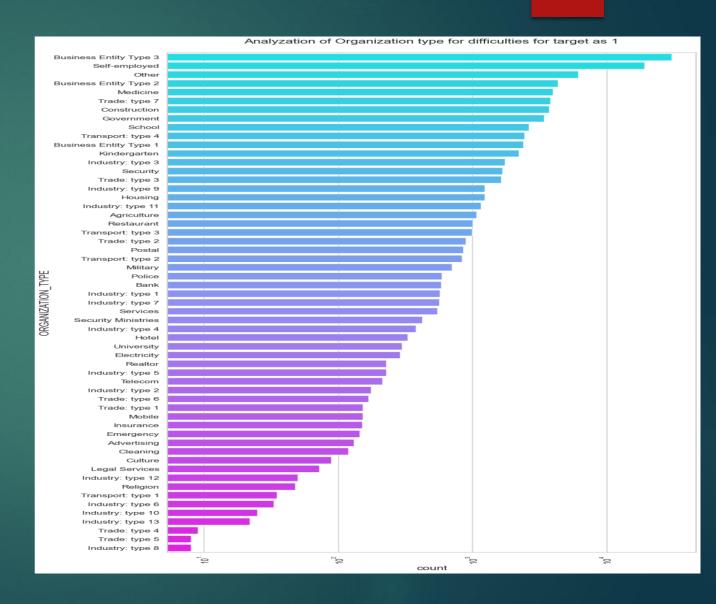
ANALYSIS OF CONTRACT TYPE



• Clients 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, type 6, type 10, religion and trade type 5, type 4.

DISTRIBUTION OF ORGANIZATION TYPE



CORELATION FOR TARGET 0

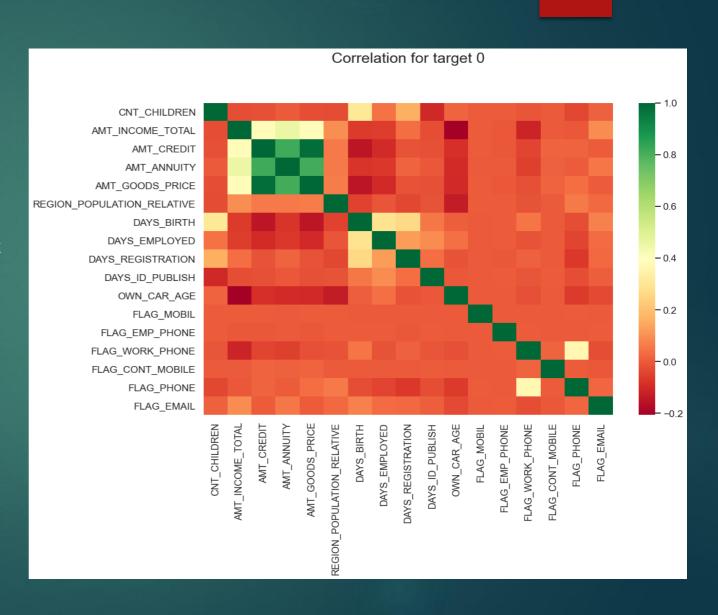
INFERENCES

• Credit amount is higher for low age and vice-versa.

• Credit amount is higher for less children count client have and vice-versa.

• Credit amount is higher to densely populated area.

• The income is also higher in densely populated area.

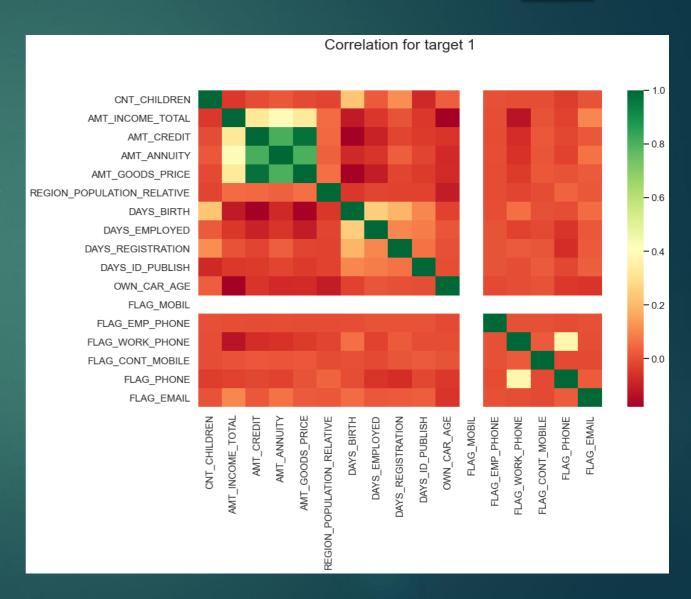


CORELATION FOR TARGET 1

INFERENCES

• The client's permanent address does not match contact address are having less children and vice-versa.

• The client's permanent address does not match work address are having less children and vice-versa.

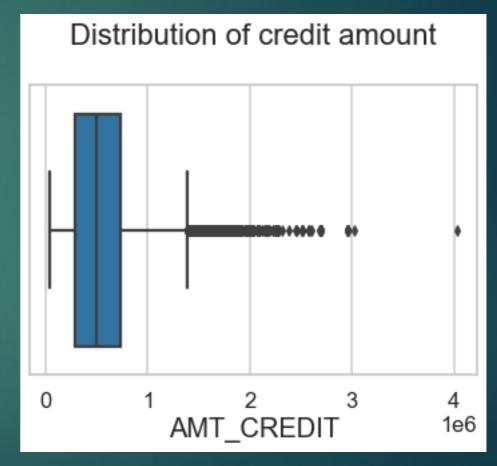


NUMERICAL UNIVARIATE ANALYSIS FOR TARGET 0

Some outliers are noticed in credit amount.

The first quartile is bigger than third quartile for credit amount which means most of the credits of clients are present in the first quartile.

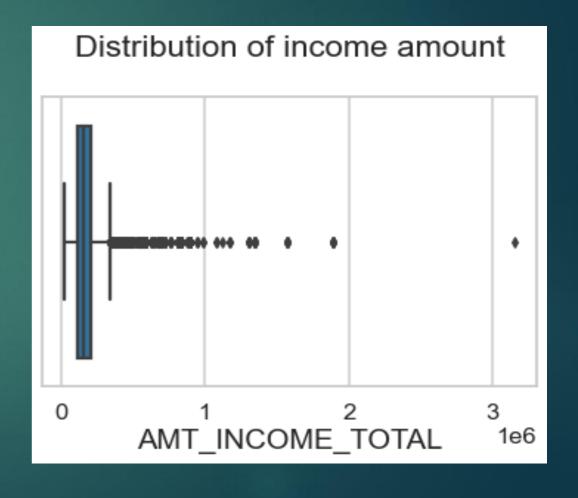
DISTRIBUTION OF CREDIT AMOUNT



• Some outliers are noticed in income amount.

• The third quartiles is very slim for income amount.

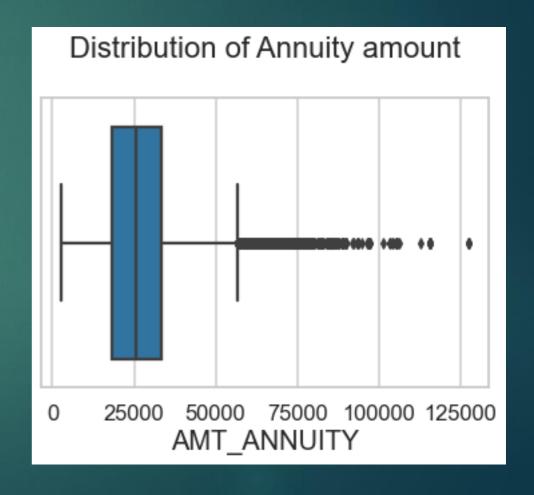
DISTRIBUTION OF INCOME AMOUNT



• Some outliers are noticed in annuity amount.

• The first quartile is bigger than third quartile for annuity amount which means most of the annuity clients are from first quartile.

DISTRIBUTION OF ANNUITY AMOUNT

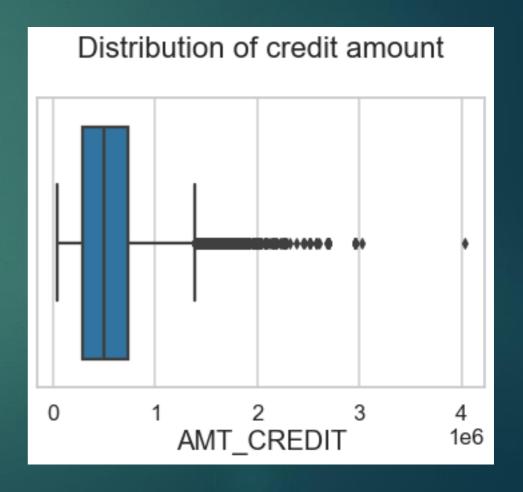


NUMERICAL UNIVARIATE ANALYSIS FOR TARGET 1

• Some outliers are noticed in credit amount.

• The first quartile is bigger than third quartile for credit amount which means most of the credits of clients are present in the first quartile.

DISTRIBUTION OF CREDIT AMOUNT



Some outliers are noticed in income amount.

• The third quartiles is very slim for income amount.

• Most of the clients of income are present in first quartile.

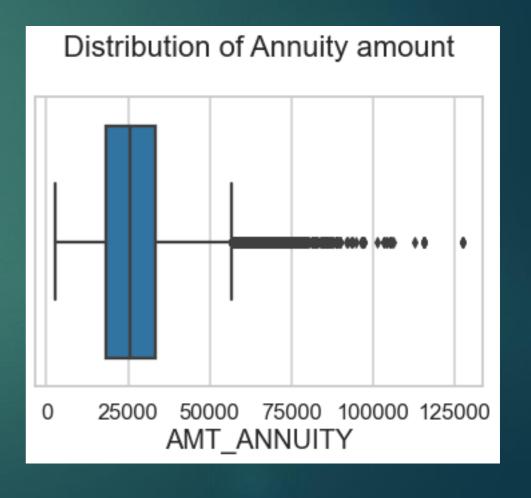
DISTRIBUTION OF INCOME AMOUNT



• Some outliers are noticed in annuity amount.

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DISTRIBUTION OF ANNUITY AMOUNT



NUMERICAL BIVARIATE ANALYSIS FOR TARGET 0

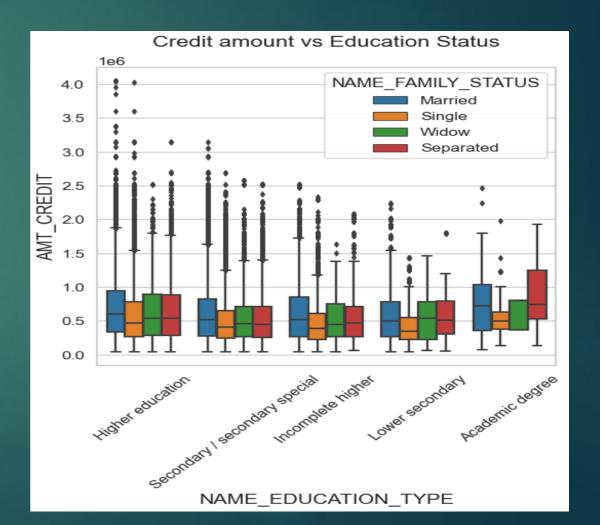
CREDIT AMOUNT VS EDUCATION STATUS

INFERENCES

• Family status of 'marriage' and 'separated' of Academic degree education are having higher number of credits than others.

• Also, higher education of family status of 'marriage', 'single' are having more outliers.

• Marriage for Academic degree is having most of the credits in the third quartile.



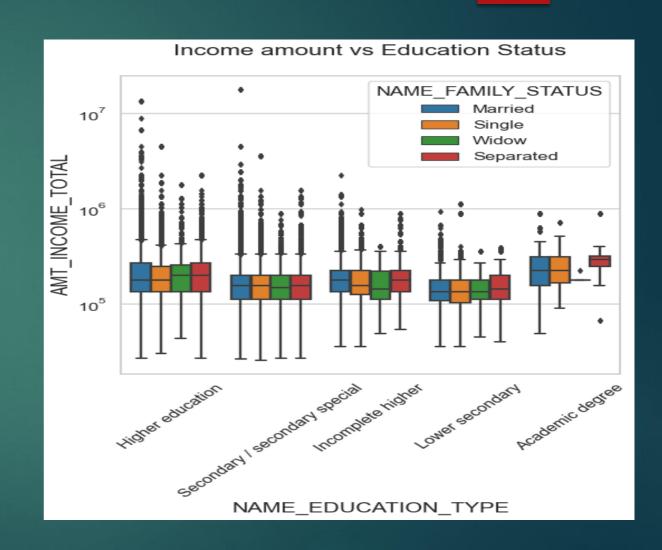
INCOME AMOUNT VS EDUCATION STATUS

INFERENCES

• Education type 'Higher education' the income amount is mostly equal with family status. It does contain many outliers.

• Less outlier are having for Academic degree but there income amount is little higher that Higher education.

• Lower secondary of civil marriage family status are have less income amount than others.

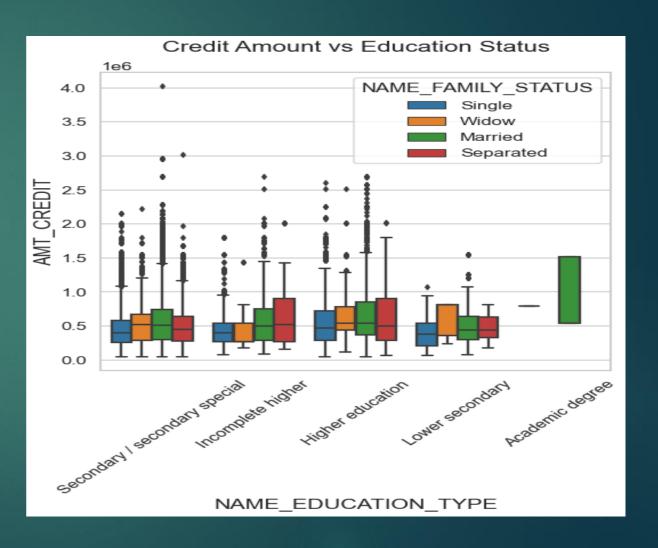


NUMERICAL BIVARIATE ANALYSIS FOR TARGET 1

CREDIT AMOUNT VS EDUCATION STATUS

INFERENCES

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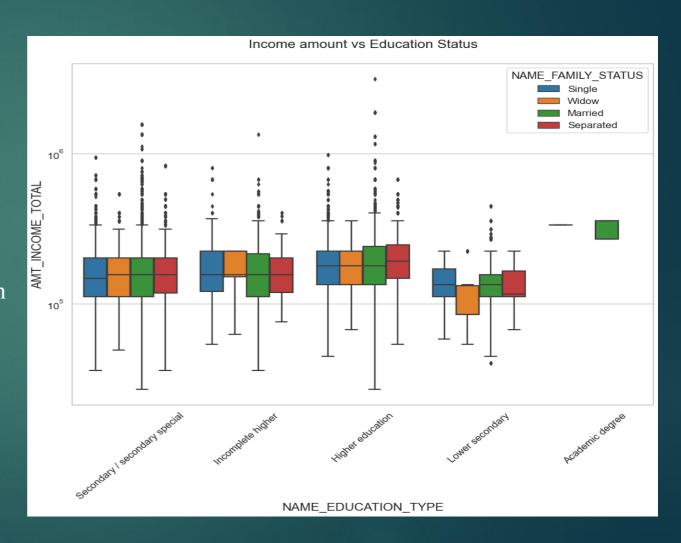


INCOME AMOUNT VS EDUCATION STATUS

INFERENCES

• The incomplete higher has less outliers.

• The higher education shows to have more outliers with respect to income



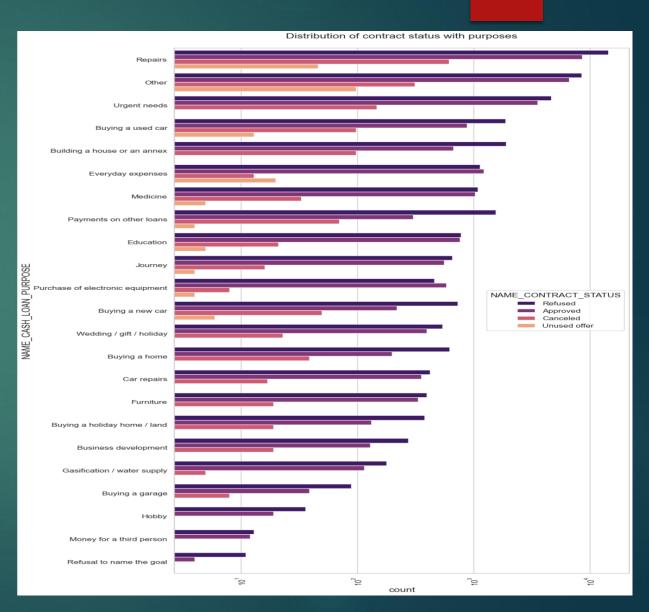
Distribution of contract status with purpose

INFERENCES

• Most rejection of loans came from purpose 'repairs'.

• For education purposes we have equal number of approves and rejection.

Paying other loans and buying a new car is having significant higher rejection than approves.



Credit amount vs Housing type

INFERENCES

- Housing type, office appartment is having higher credit of target 0 and co-op apartment is having higher credit of target 1.
- So, we can conclude that bank should avoid giving loans to the housing type of co-op apartment as they are having difficulties in payment.
- Bank can focus mostly on housing type with parents or House\appartment or miuncipal appartment for successful payments.

