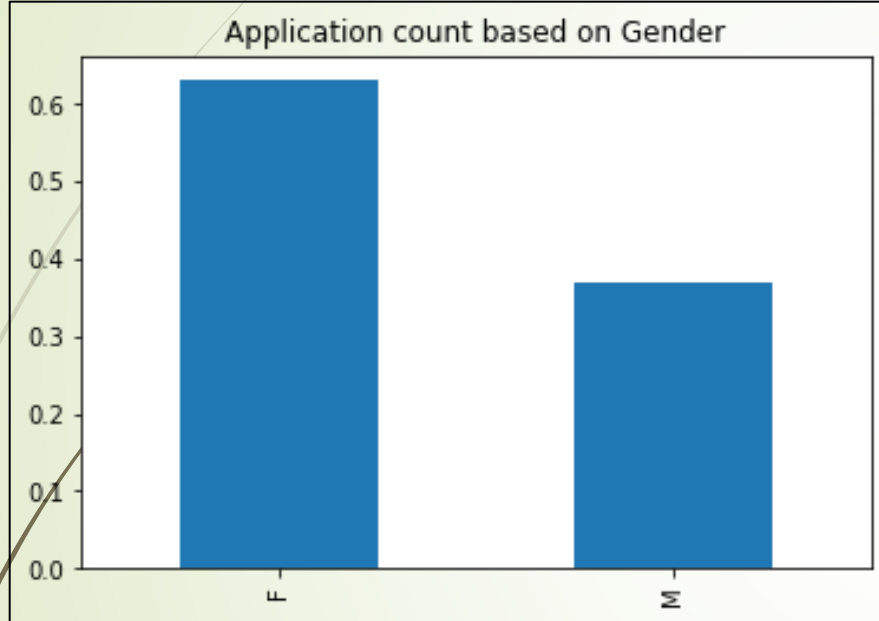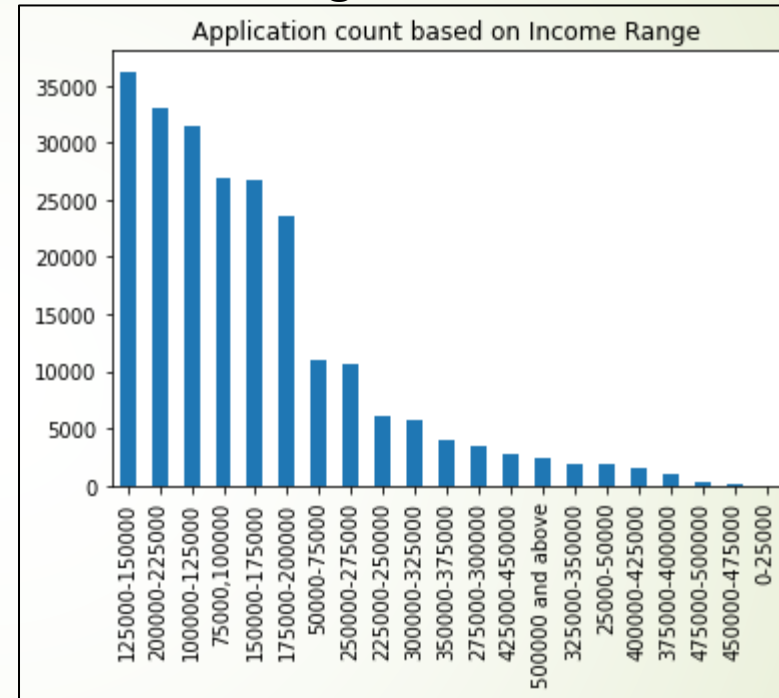# Presentation on EDA CASE Study

Ms. Sumedha Chavan

Clients with no payment difficulties
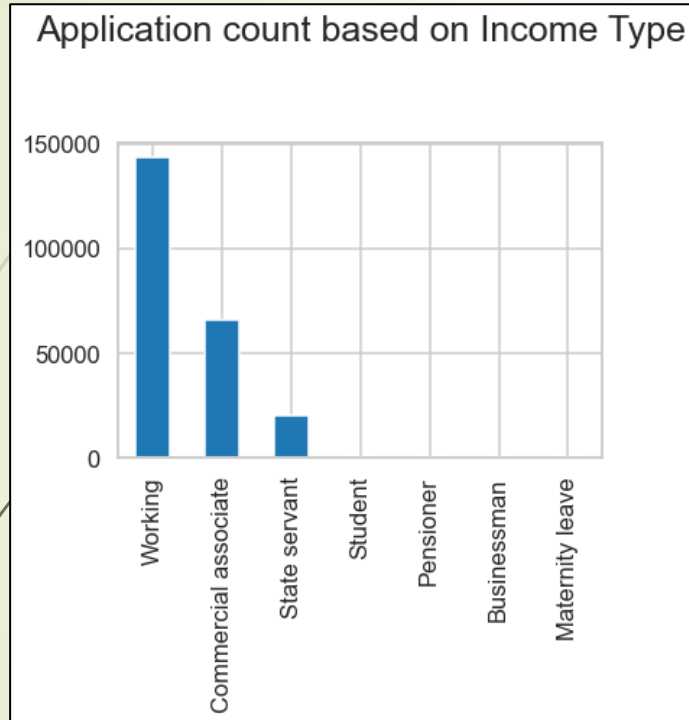
Application count based on Gender

Female (63%) count is more than Male (36.9%).
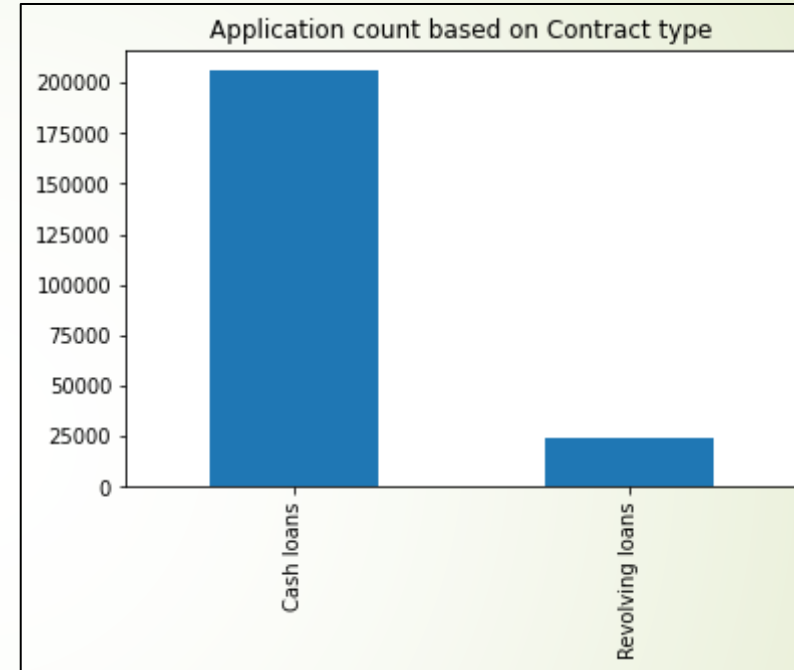
Application count based on Income Range

Application count with no payment difficulties with Income range from 100000 to 200000 is large than income range of 225000 and below.

Application count based on Income Type

Number of applications with no payment difficulties is more for Income type 'working', 'commercial associate', and 'State Servant' and it is less for 'student' ,'pensioner', 'Businessman' and 'Maternity leave'.
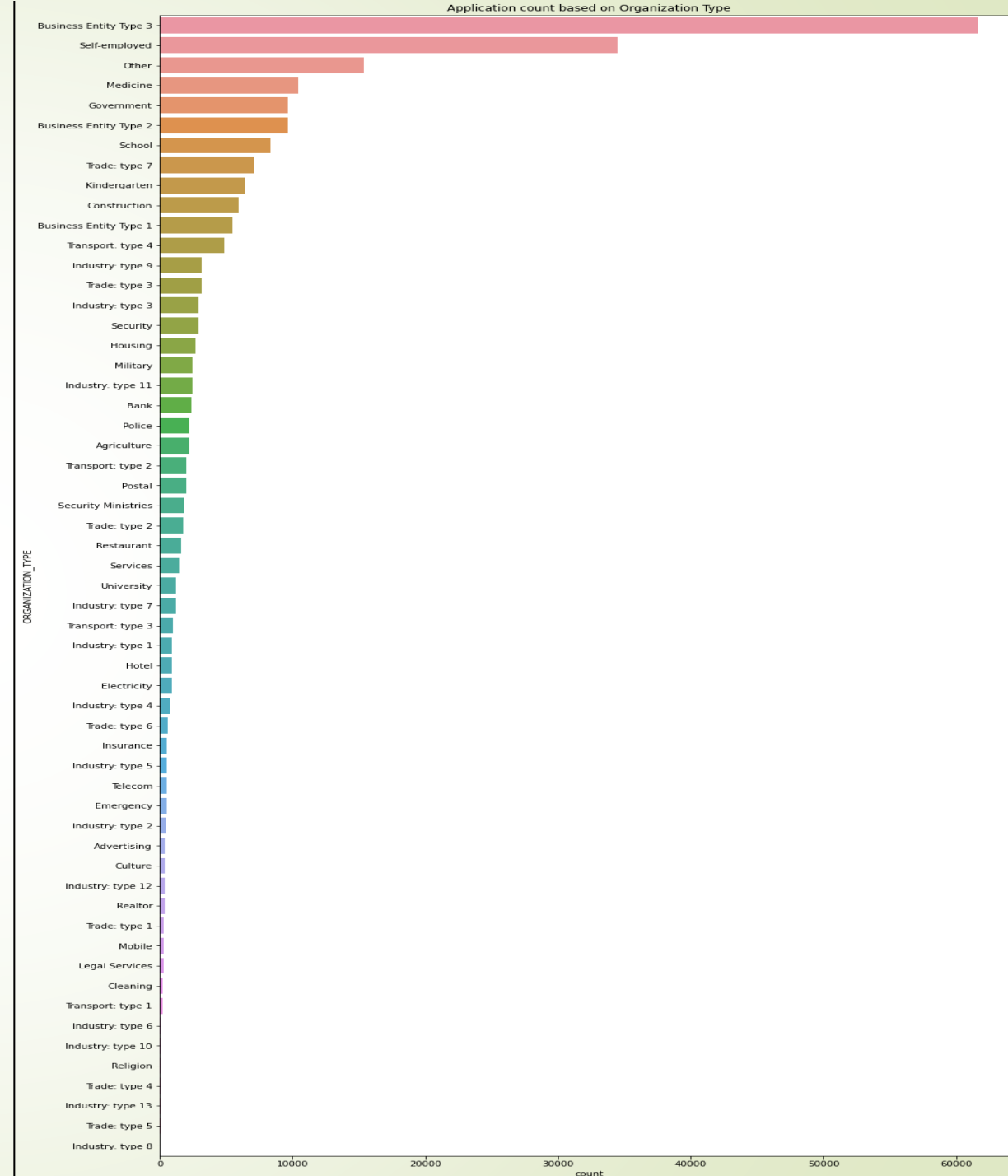
Application count based on contract type

For contract type, Cash loans has more number than revolving loans.

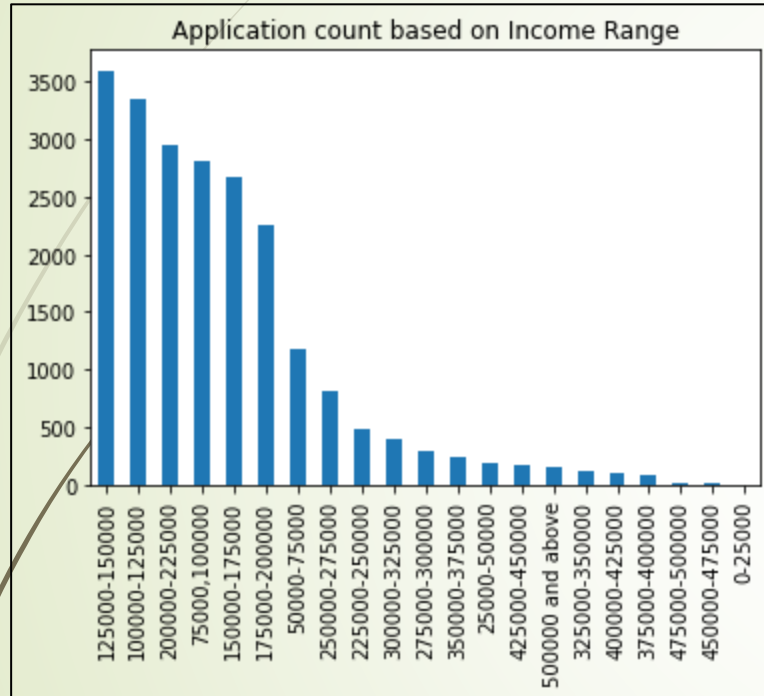**Application count based on 'Organization Type'**

Most of the applications are from organization type 'Business entity Type 3' , 'Self employed', 'Other' , 'Medicine' and 'Government' and very less from organisation type less clients are from Industry type 8,type 5, type 13, religion and type 4.
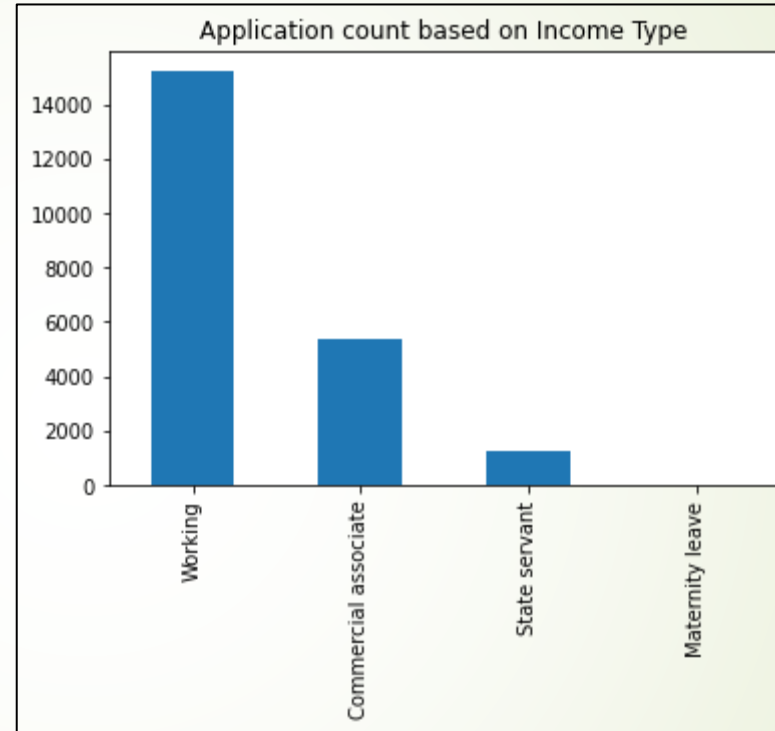
Clients with payment difficulties

Also 8.66 % of new applications have payment difficulties.

Application count based on Income Range

Applications which have payment difficulty have higher income range (above 150000).

Application Count based on Income Type

For income type 'working', 'commercial associate', and 'State Servant' the number of applications with payment difficulty is higher than 'Maternity leave. Also there is no other income types present in this category i.e. 'student', 'pensioner' and 'Businessman' which means they don't do any late payments.
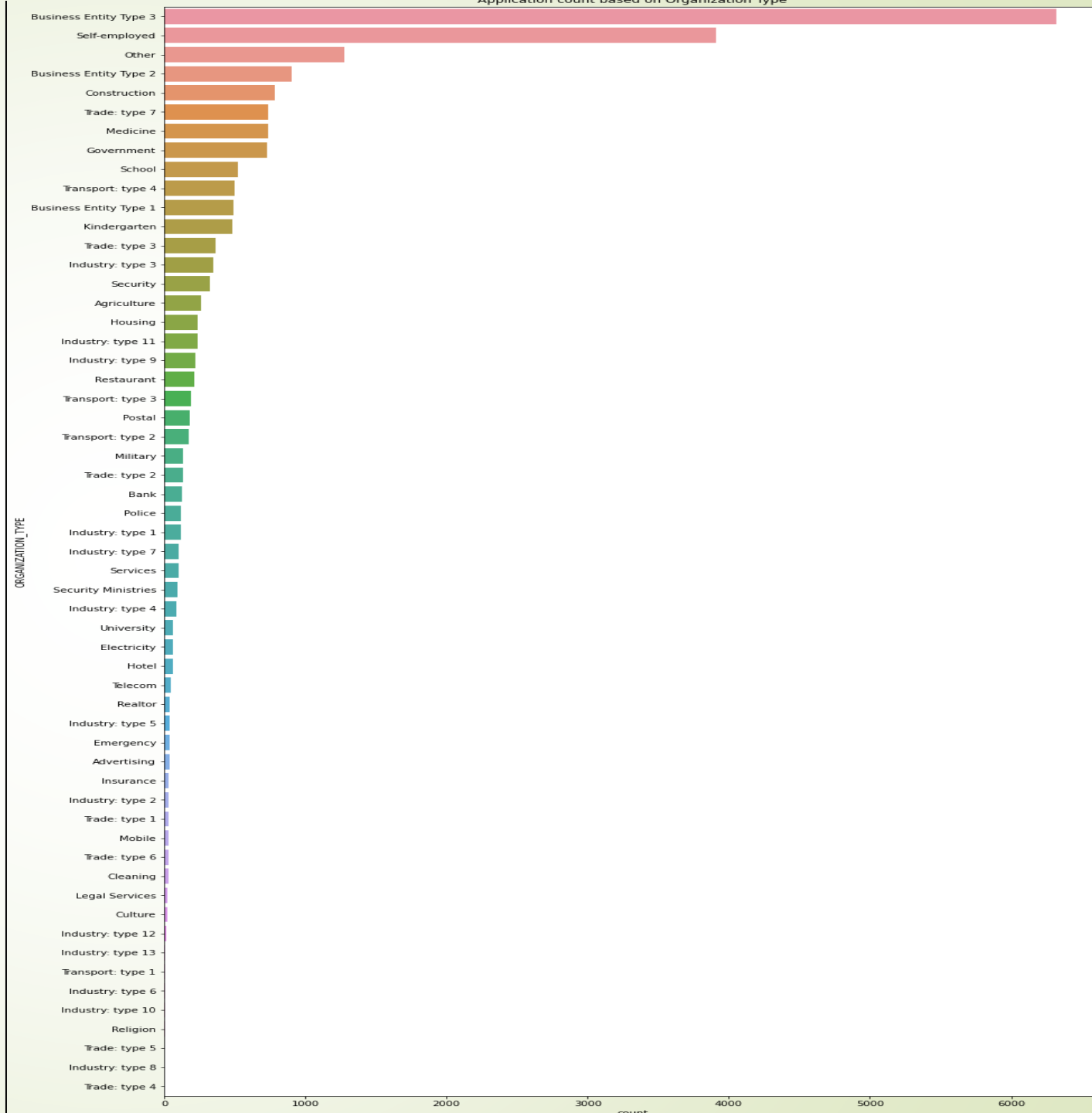
Application count based on Contract Type

Application count based on Contract type
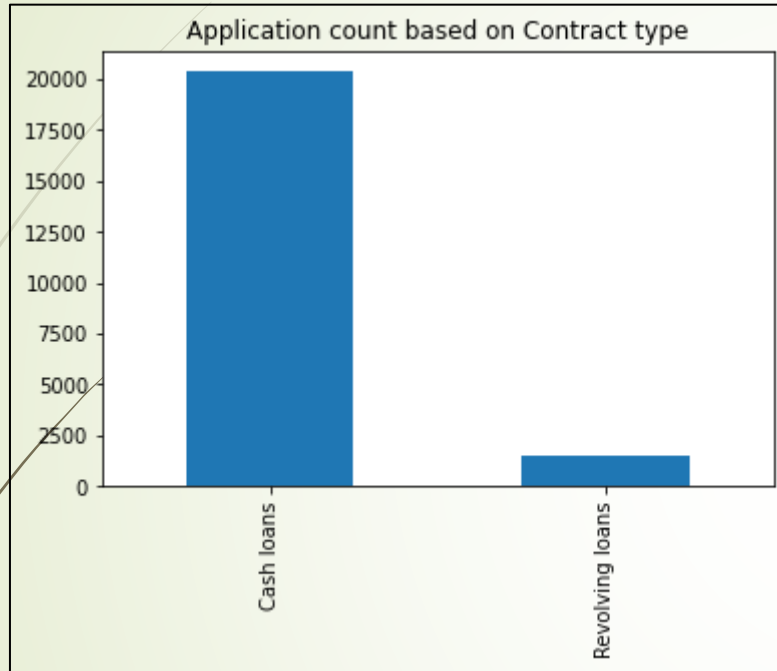
Number of applications of contract type cash loans is significantly higher than revolving loans.

Applications count based on organization type

Clients which have applied for credits are from most of the organization type 'Business entity Type 3' , 'Self employed' , 'Other'. Less clients are from Industry type 8,type 6, type 10, religion and trade type 5, type 4.

Bivariate Exploration

Contract Type Vs Purpose of loan

Most of loans are applied for the purpose of Repairs, which has higher number of rejections as well.

Applications for the purpose of education have equal number of approvals and rejections

Applications for the purpose of Everyday expenses have more number of approvals than rejections

Contract Status vs Purpose of loan

Previous Credit Amount Vs Housing Type
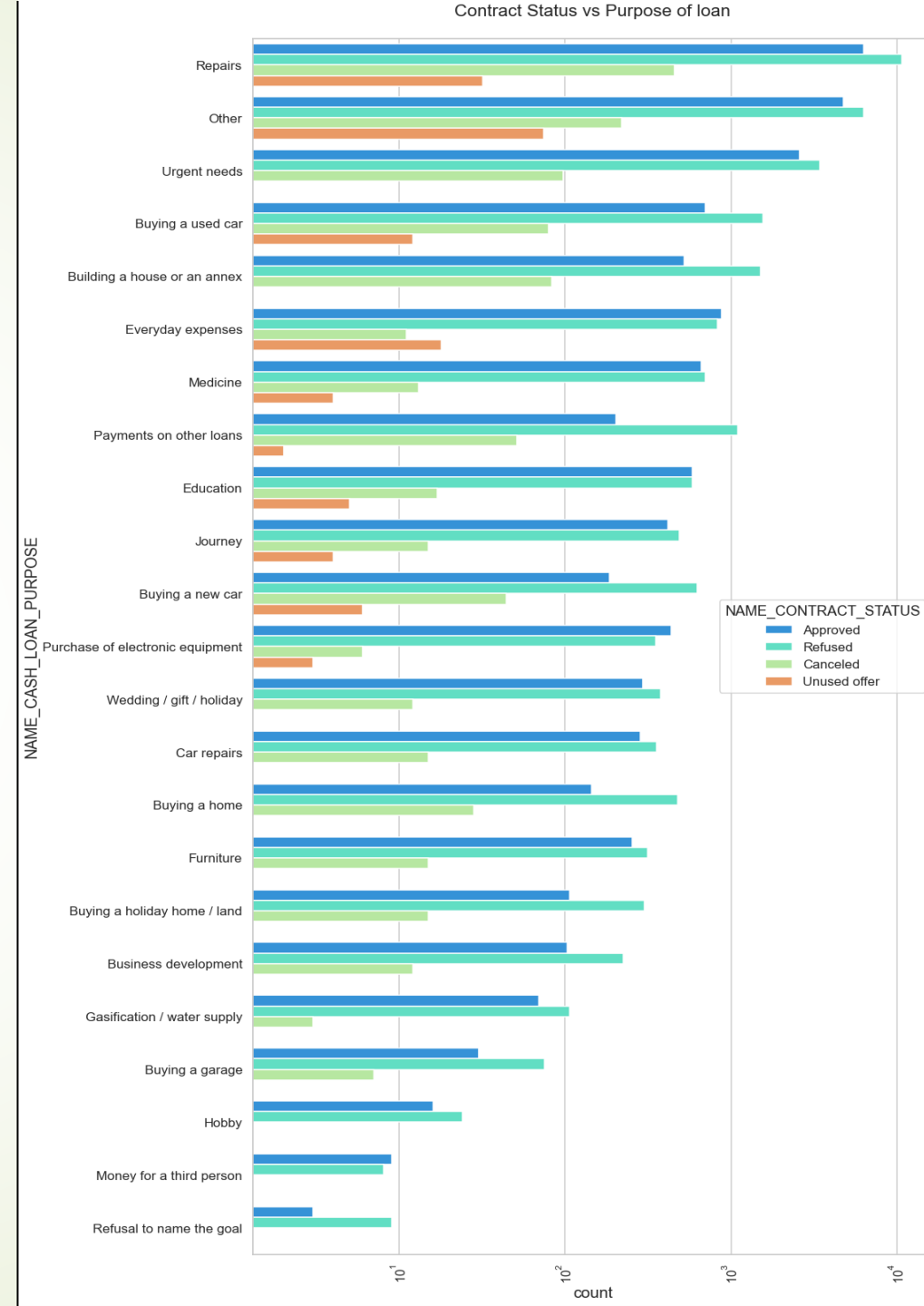
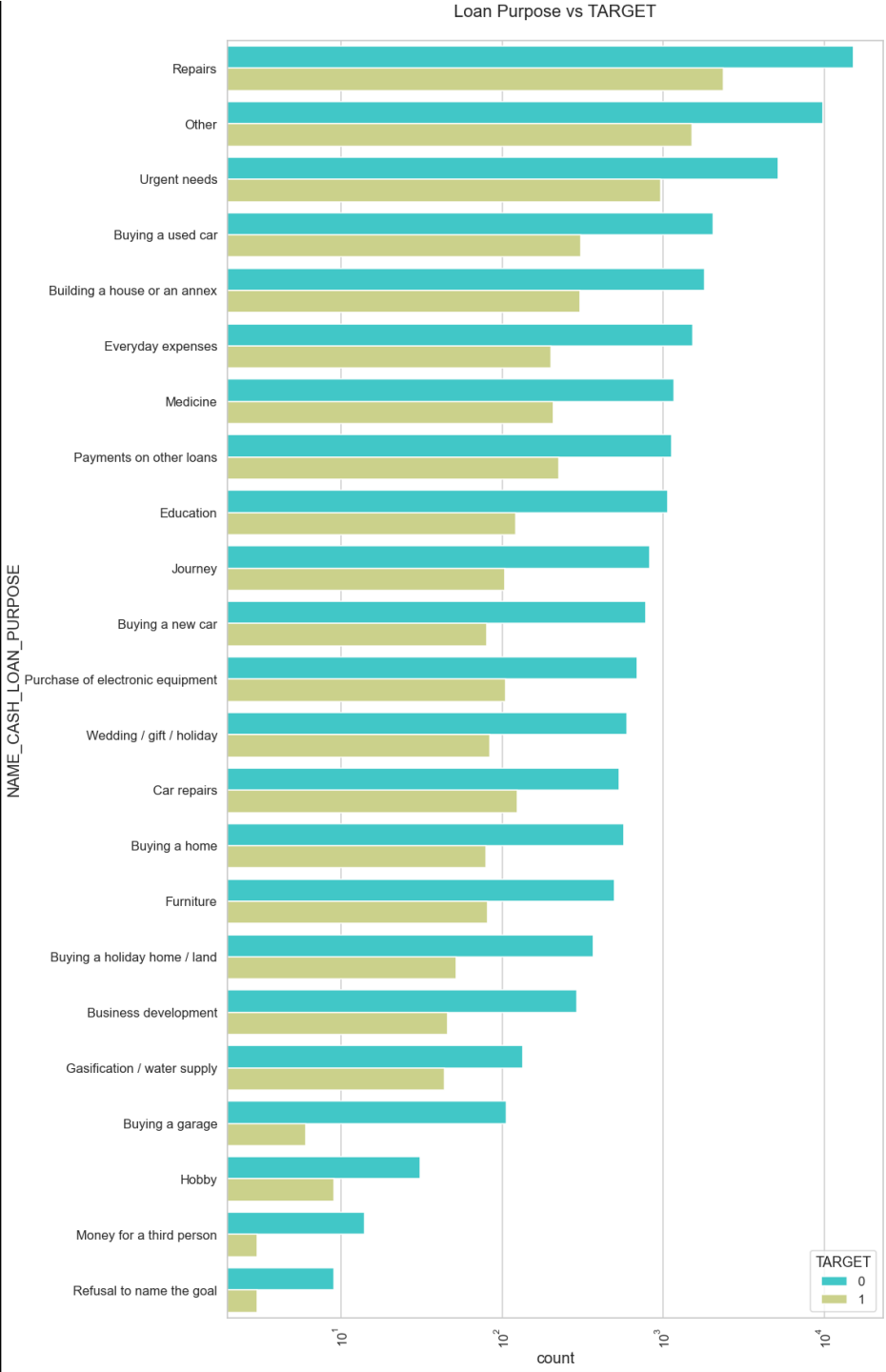Previous Credit amount vs Housing Type
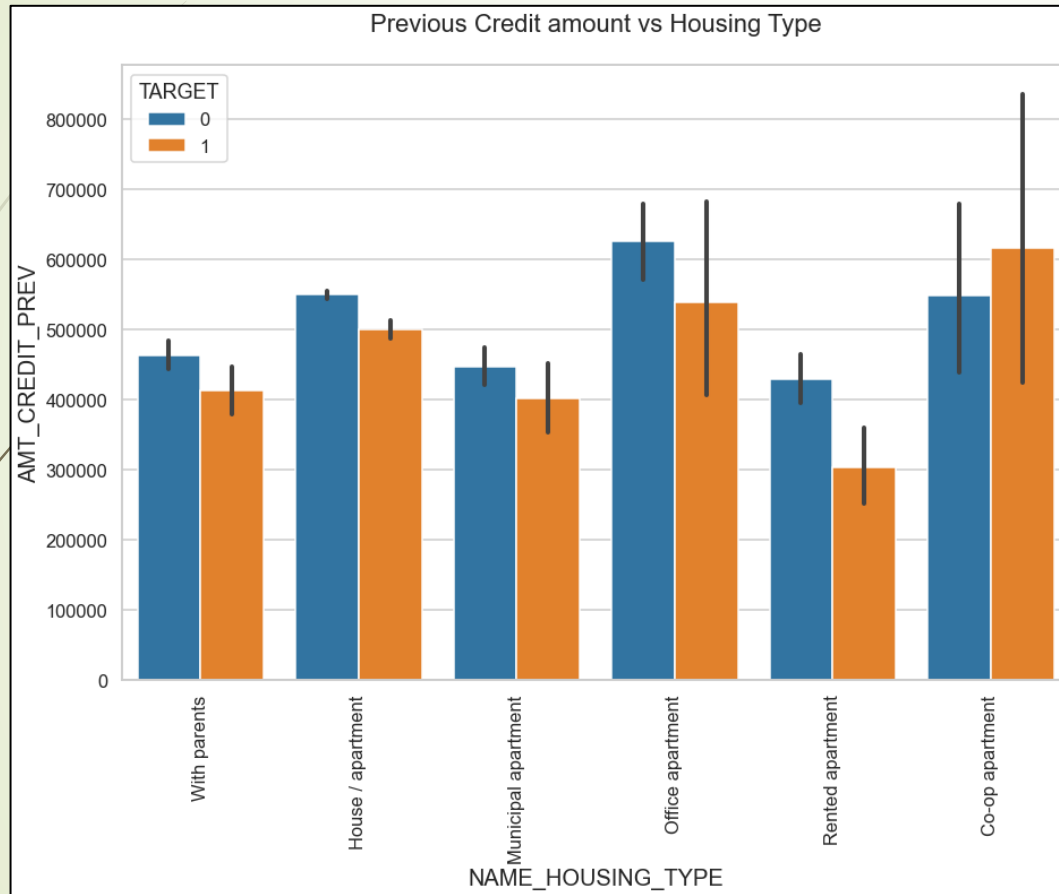
office apartment have more number of applications with no payment difficulties and also higher credit amount

co-op apartment have more number of applications with payment difficulties

Loan Purpose Vs Target

Application having difficulty are mostly from Loan purpose of 'Repairs'.

Conclusion

- Bank should consider applications from Females, as they have less difficulty with payments.
- Bank should not consider below factors as deciding factor as higher income range have more number of applications in both with payment difficulties and with no payment difficulties.
    1. Income range
    2. Income type as 'working'
    3. Contract type

- Bank should consider applications with Income type 'student', 'pensioner' and 'Businessman' as they don't do any late payments.

- Bank should be careful while giving loans to the housing type of co-op apartment and Bank can focus mostly on housing type with parents or House\apartment or municipal apartment for successful payments