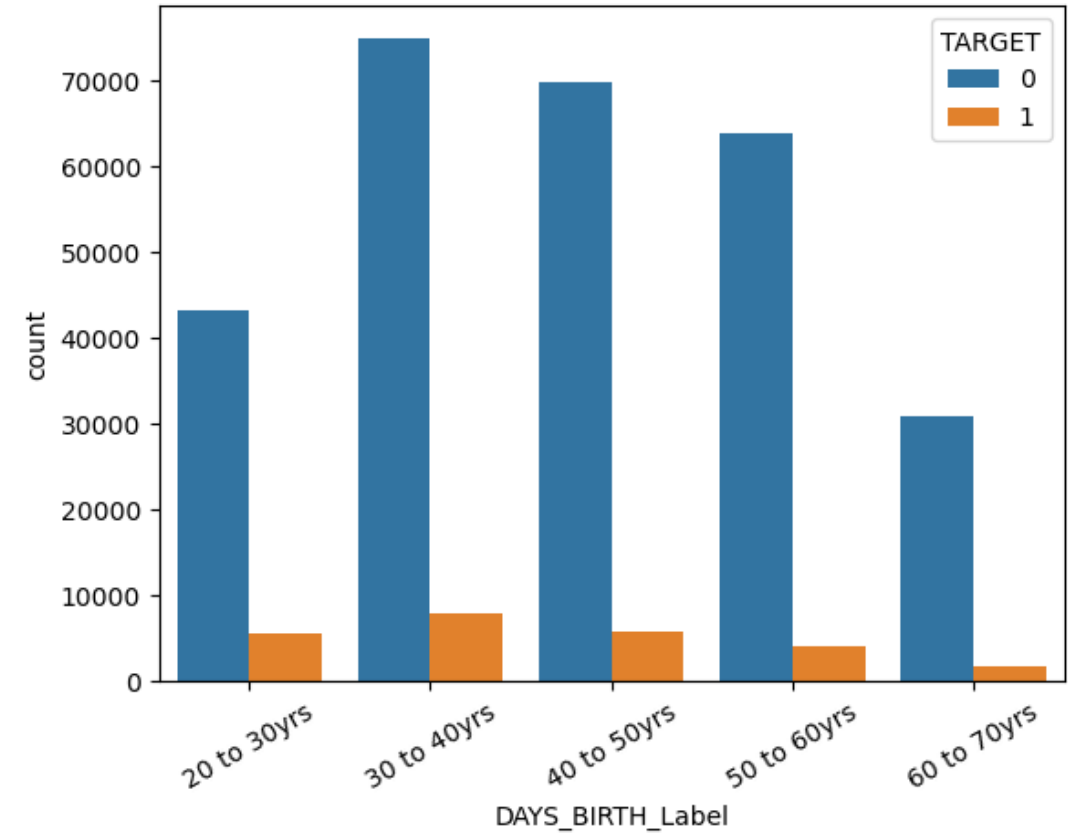
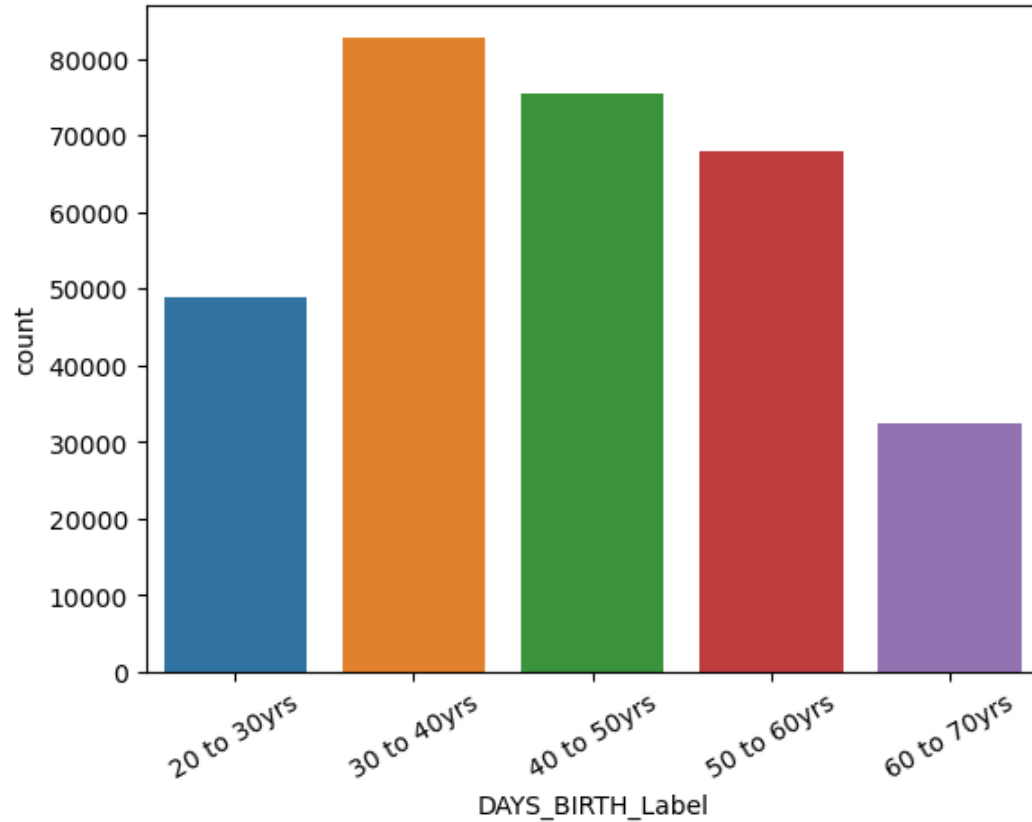


EDA Assignment

By Bharat Panera

Age group



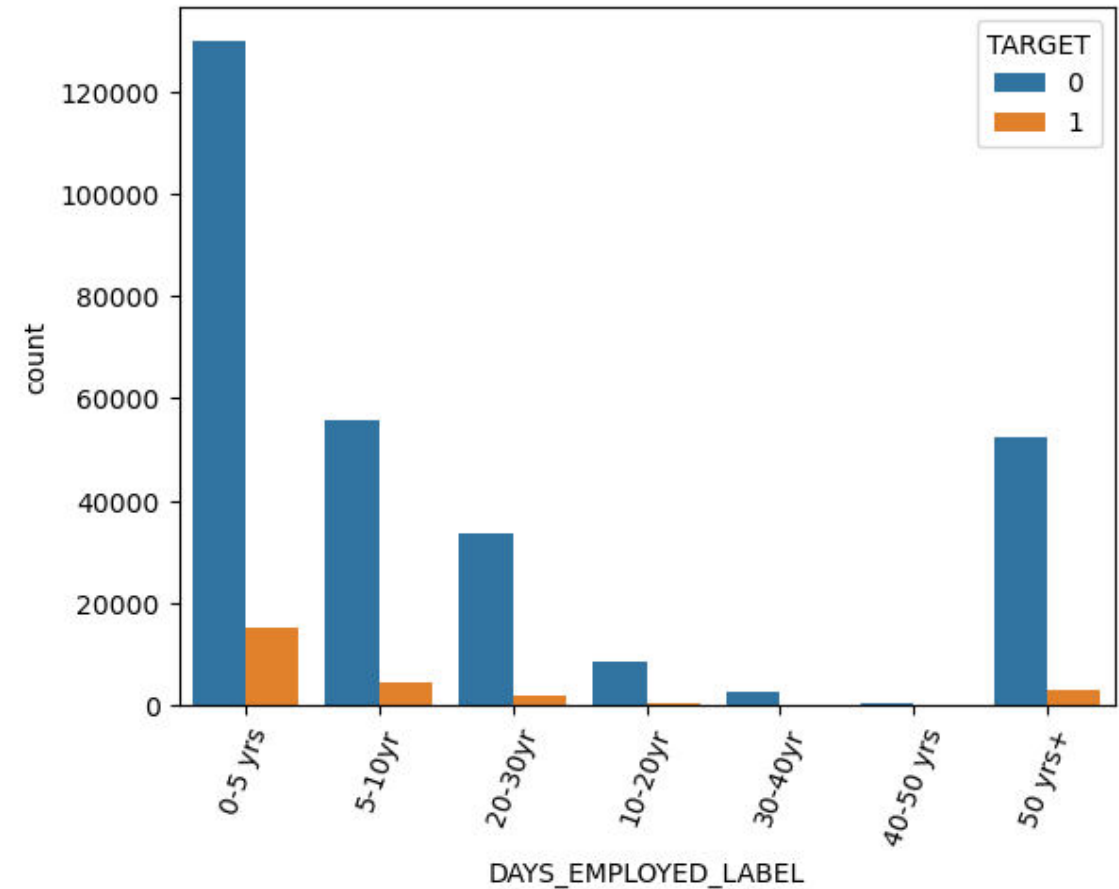
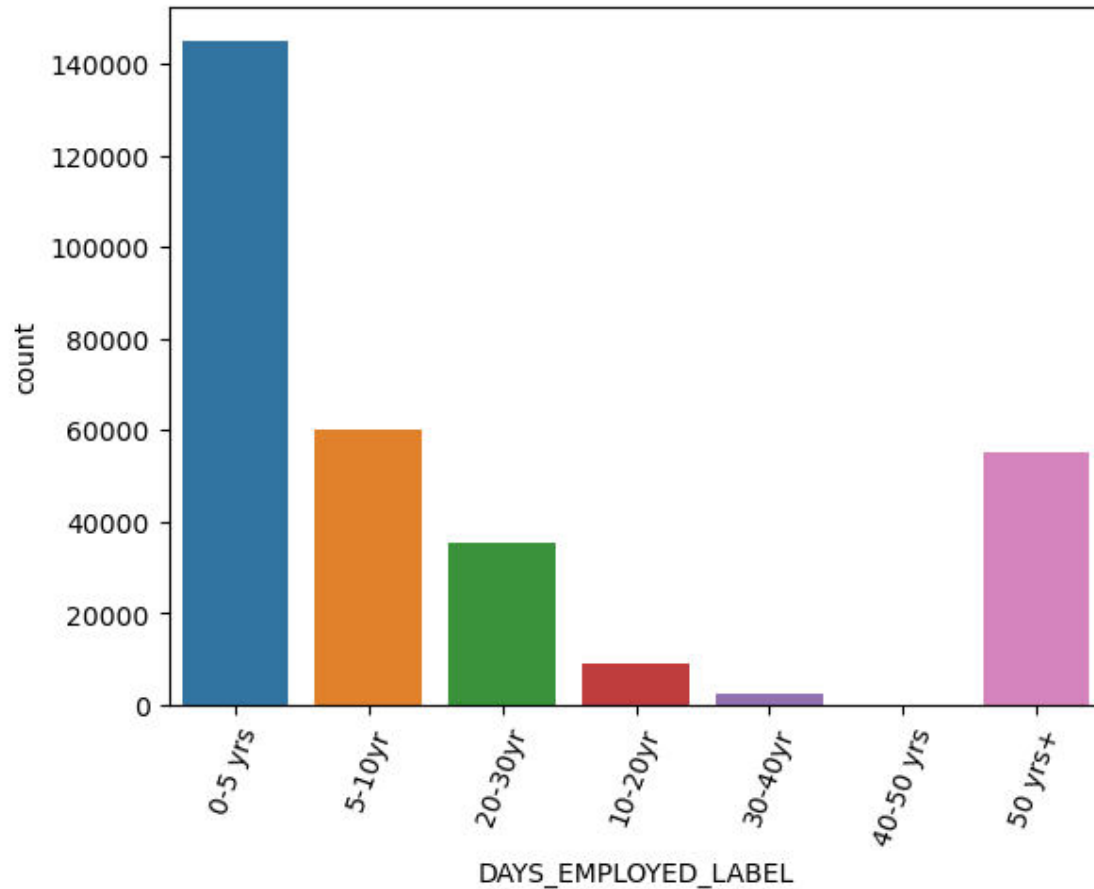
Observations:

1. Most loan applicants are aged between 30 and 60.
2. The peak age for applicants is 30 to 40.

Recommendations:

1. It is safer to focus on 30 to 40-year-olds for loans.

Employment group



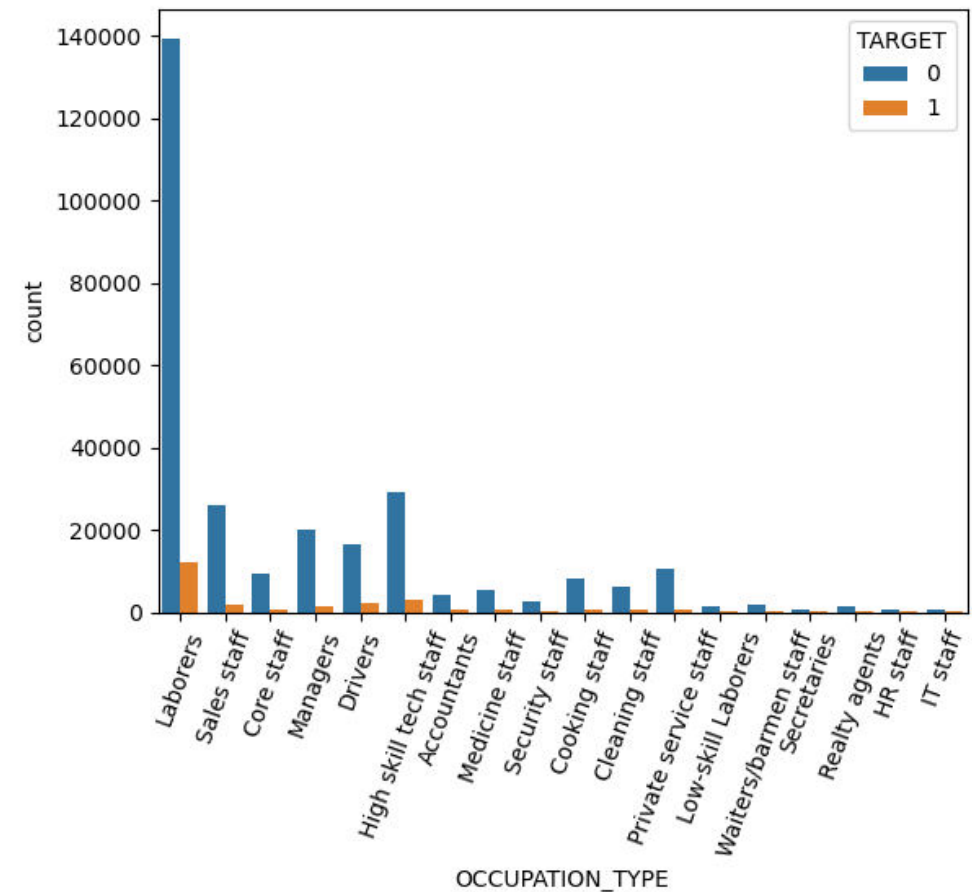
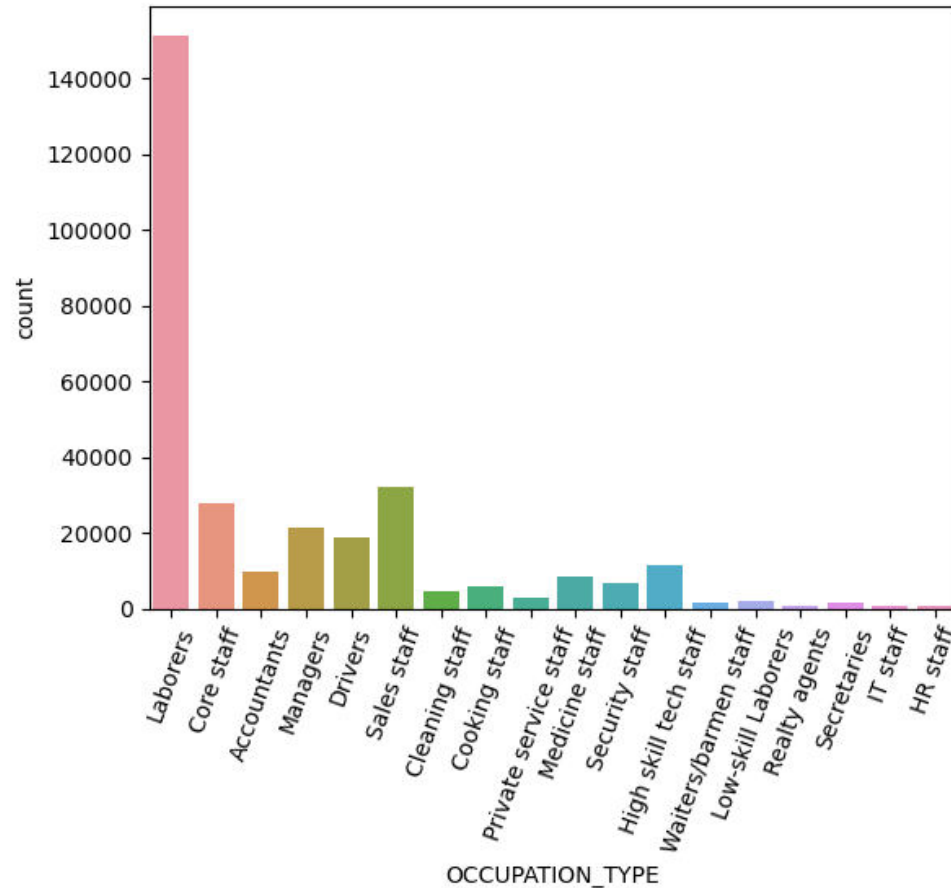
Observations:

1. High default rate among those with 0-5 years of employment with more loan application.
2. Default rates decrease with more work experience.

Recommendations:

1. Prioritize loans for those with 5-10 years of employment for lower default rates.
2. It is recommended to grant loan to group of people with more work experience.

Occupation type



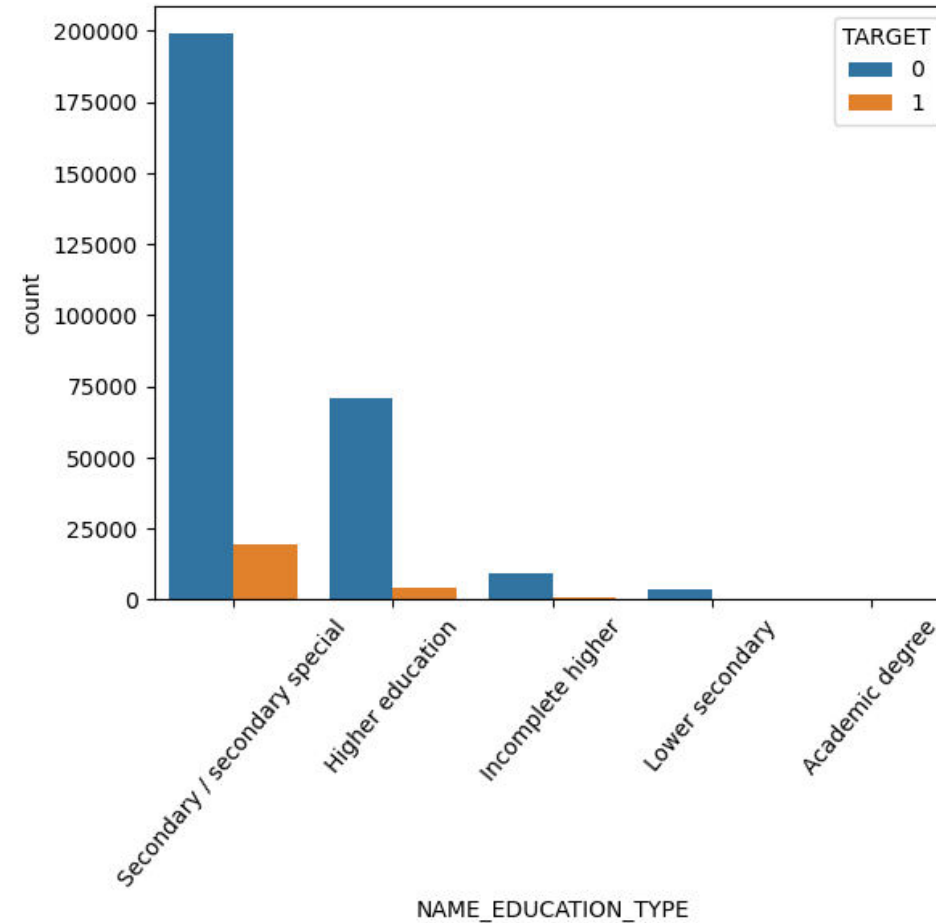
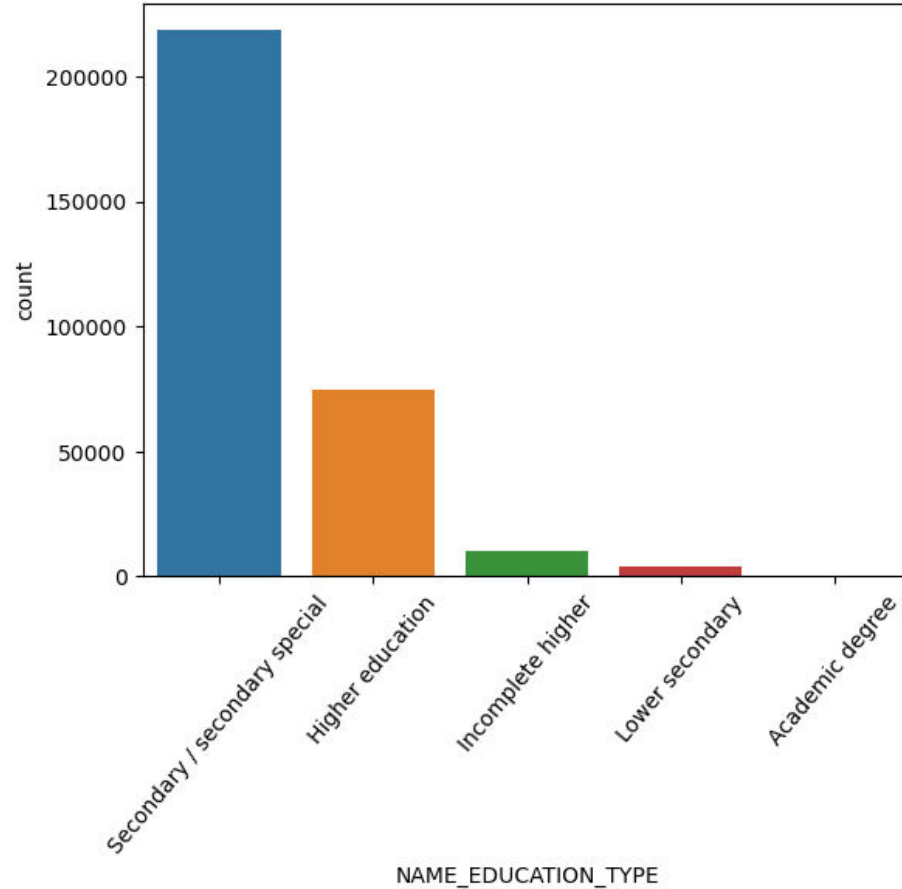
Observations:

1. Labourer is the most common occupation among clients, followed by sales staff, core staff, and managers.
2. Labourer occupation have the highest loan default rate.

Recommendations:

1. It is recommended to grant loans to people with occupations as labourers and sales staff.

Education qualification



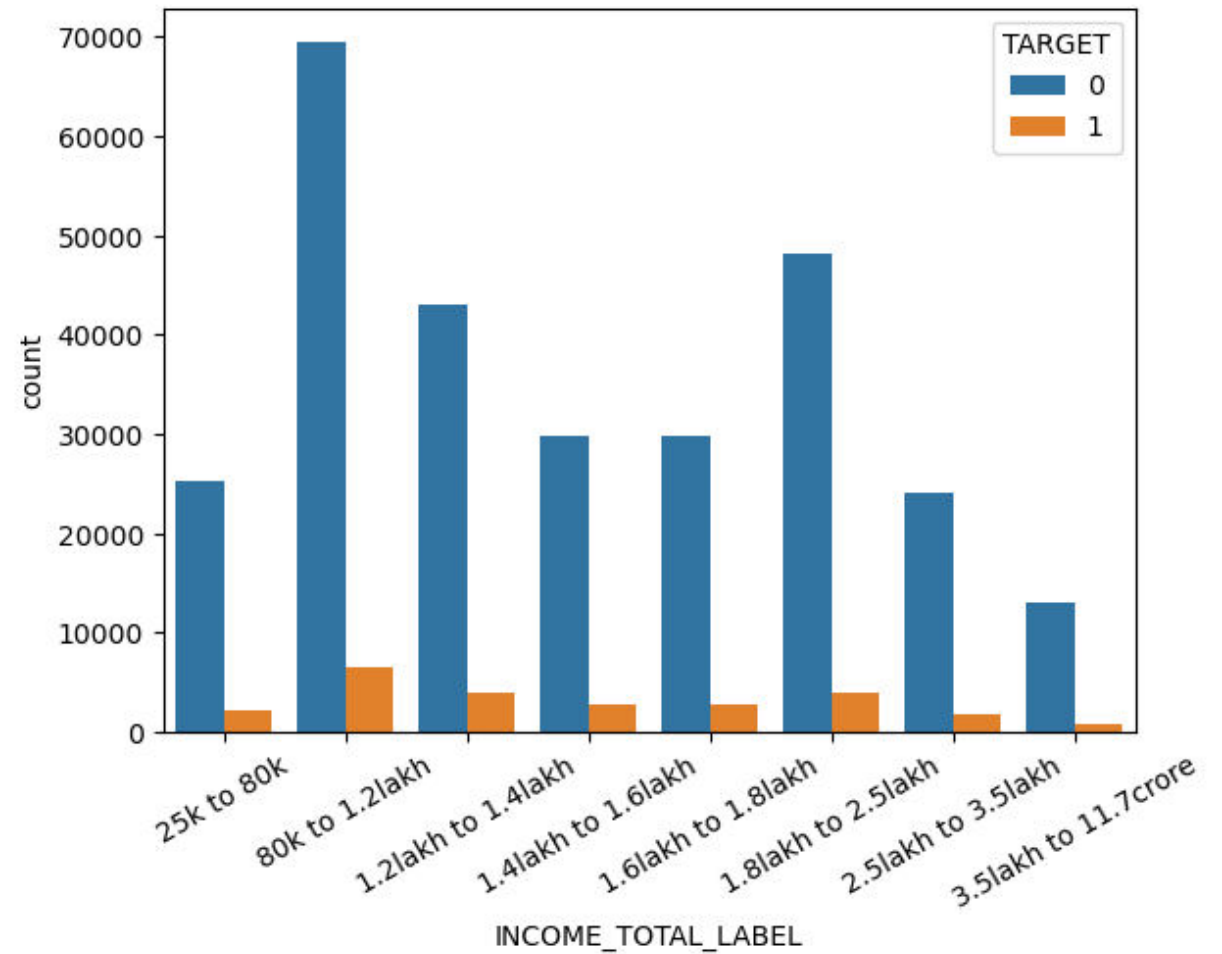
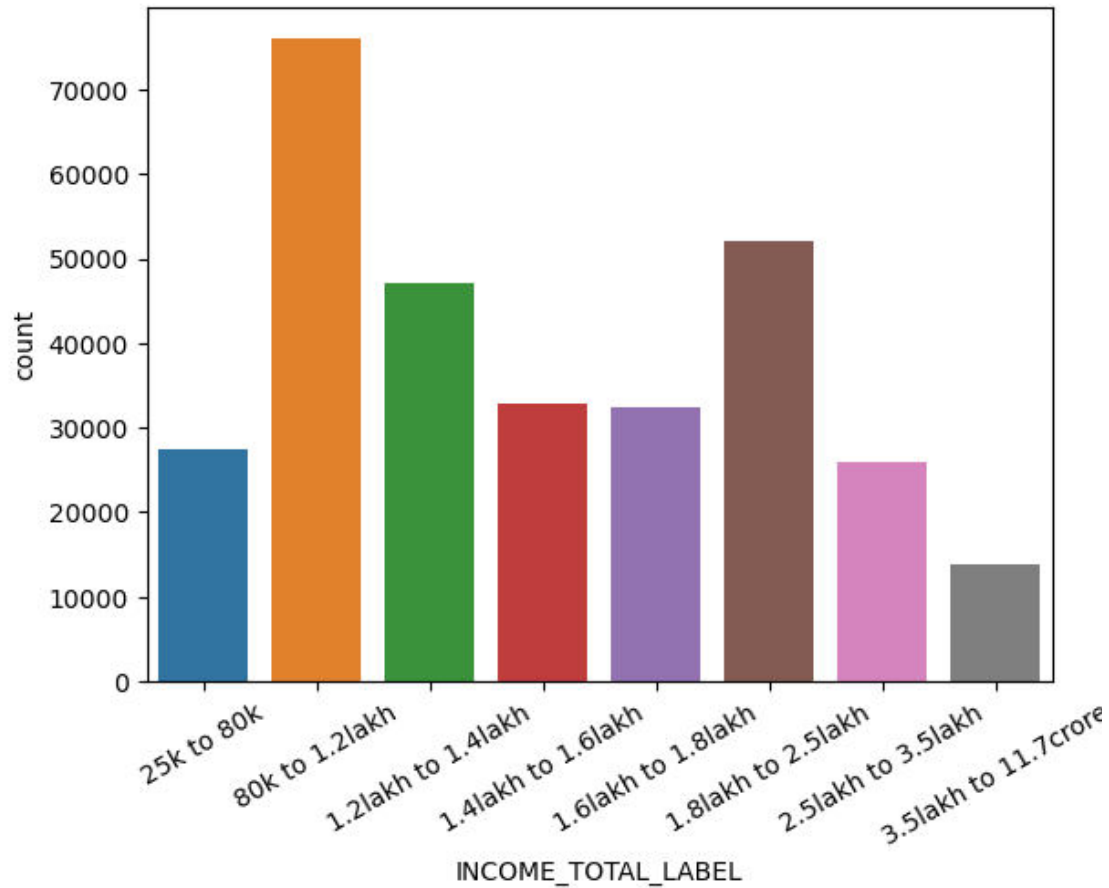
Observations:

1. Majority of people applying for a loan have completed their secondary education.

Recommendations:

1. It is recommended to grant loans to individuals who have completed at least a higher education level or higher.

Income group



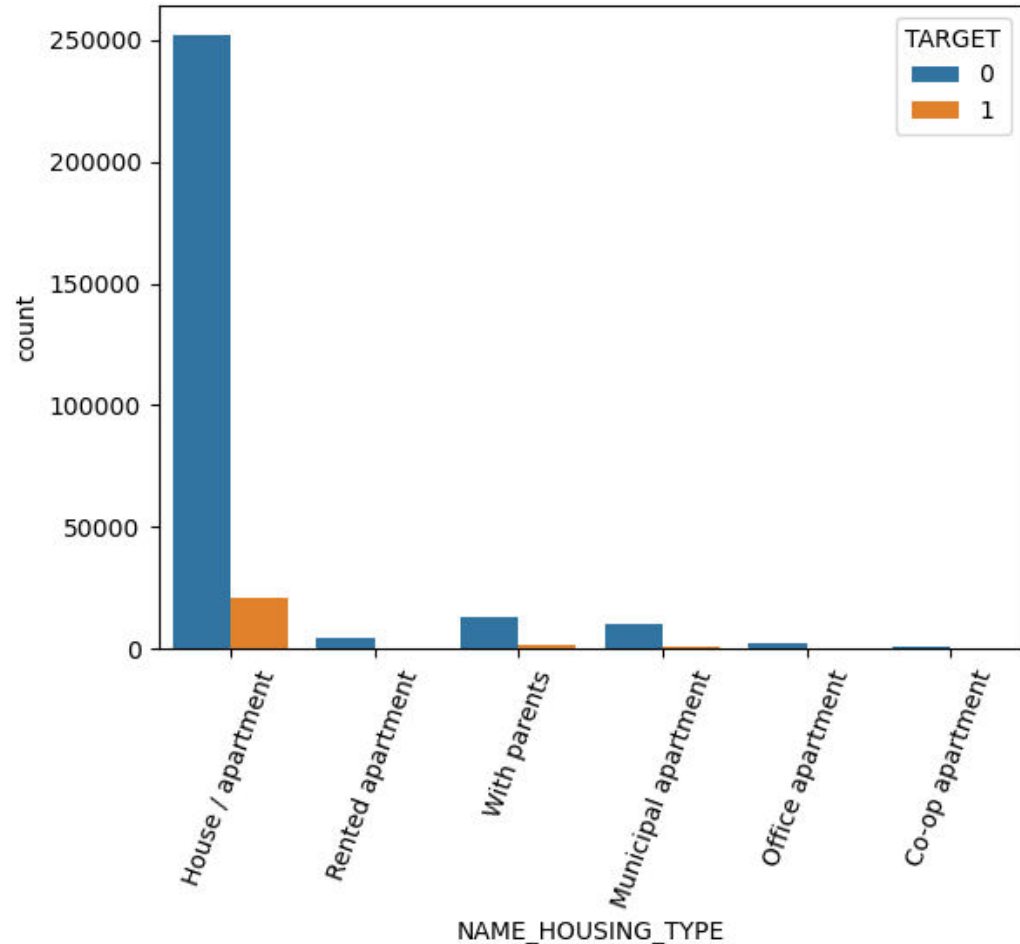
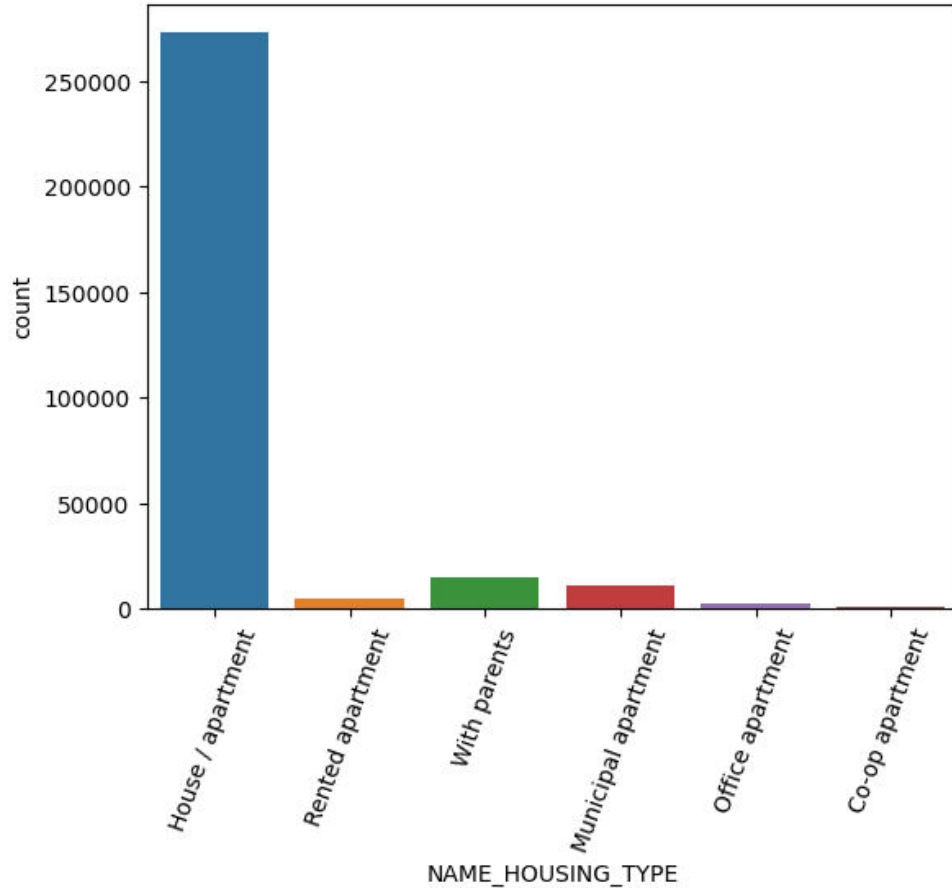
Observations:

1. Majority of people applying for a loan is in 80k to 1.2Lakh income group.
2. People with high income are less defaultee.

Recommendations:

1. It is recommended to grant loans to individuals who have income more than 80k.
2. It is risky to provide loan to the individual with low income.

Housing type



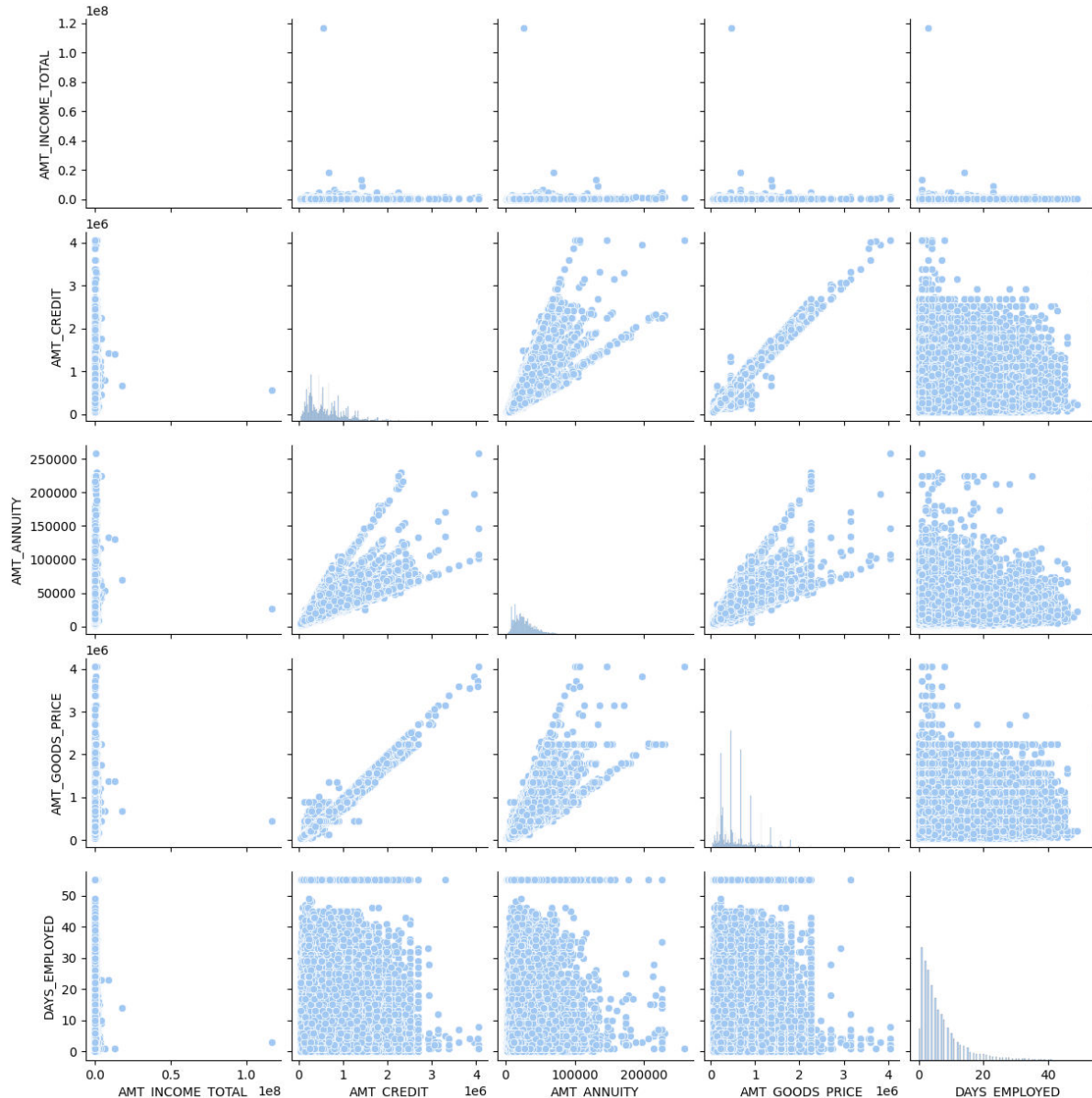
Observations:

1. It is observed that individual stays in apartment are having more defaultee rate.

Recommendations:

1. It is recommended to grant loans to individuals who stays with parents.
2. It is risky to provide loan to the individual who own a house or rented apartment.

Bivariate Analysis



Observations:

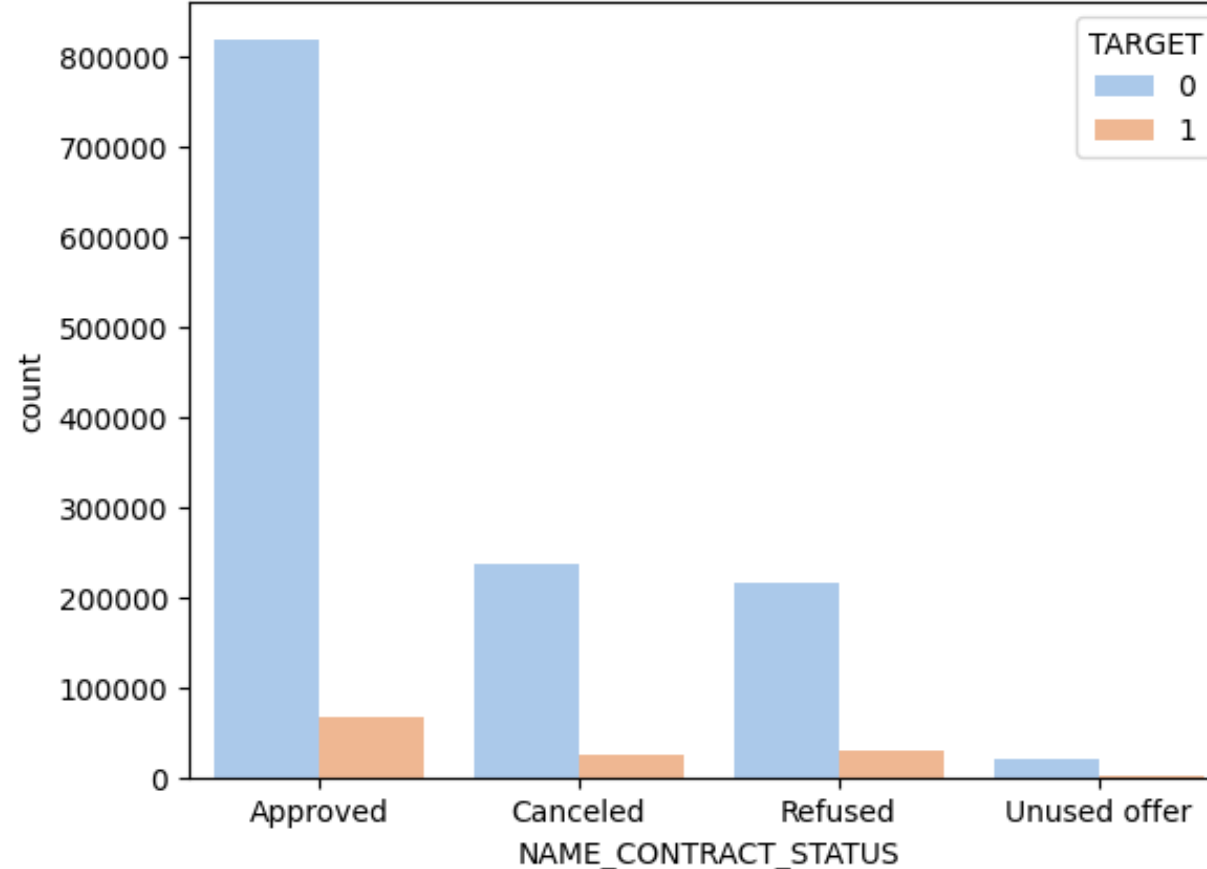
1. Higher correlation is observed between `amt_annuity` column and `amt_goods_price` column.

Recommendations:

1. It is safer to grant loan to the individual having high correlation between amount annuity and amount of good price as they are more likely to be able to repay the loan.
2. A strong correlation between `AMT_CREDIT` and `AMT_GOODS_PRICE` suggests clients often borrow an amount close to the price of the goods they intend to purchase.

Analysing previous loan application along with current applications.

Loan contract status



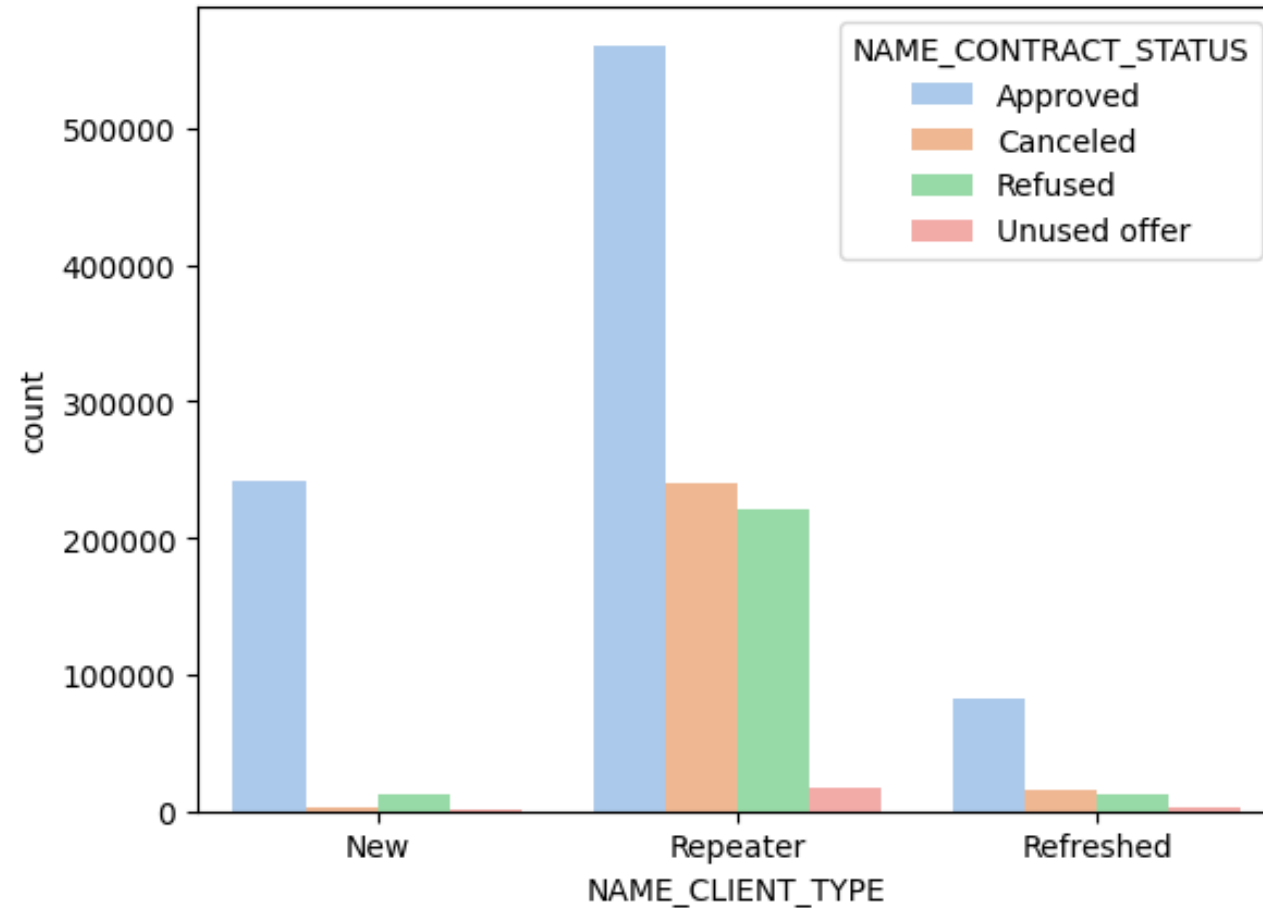
Observations:

1. Most of the loans applied are approved for the clients.
2. 62.67% of the clients got their loan approved.
3. 18.35% and 17.35% of the clients got their loans application canceled or refused.
4. Only 1.16% of the client refuse to take the loan offered.

Recommendations:

1. Loans which were canceled or refuse, indicates that clients did not match the expectations and it is riskier to provide loan to such clients.

Client type status



Observations:

1. 73.51% of the clients are in the repeater category.
2. 18.35% of the clients are in new category.
3. Only 8.13% of the client are in refreshed category

Recommendations:

1. It is beneficial to grant loan to the client whose loan got approved previously as well.

Thank you