Lending Club Case Study

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Loan data set analysis

In lending club case study I perform this following steps :-

1. Load the data
2. Check meta data /sanity check
3. Data cleaning
4. Missing value handle
5. EDA

      univariate analysis

      segment univariate analysis

      bivariate analysis

Lending Club Case Study Analysis

- In this lending club case study understand about column attribute and it's meta data

- After this I perform the **Data Cleaning and missing value handling** of loan data set

    1. Find the null columns and remove from data set

    2. some change the value and created new column

- I perform **EDA** in this I use following steps :-

    1. **Univariate analysis**, **segment univariate analysis** and **bivariate analysis** in this I choose imported some columns and basedon   that data displaying some plots and charts like box , bar ,   histogram, Heatmap etc.
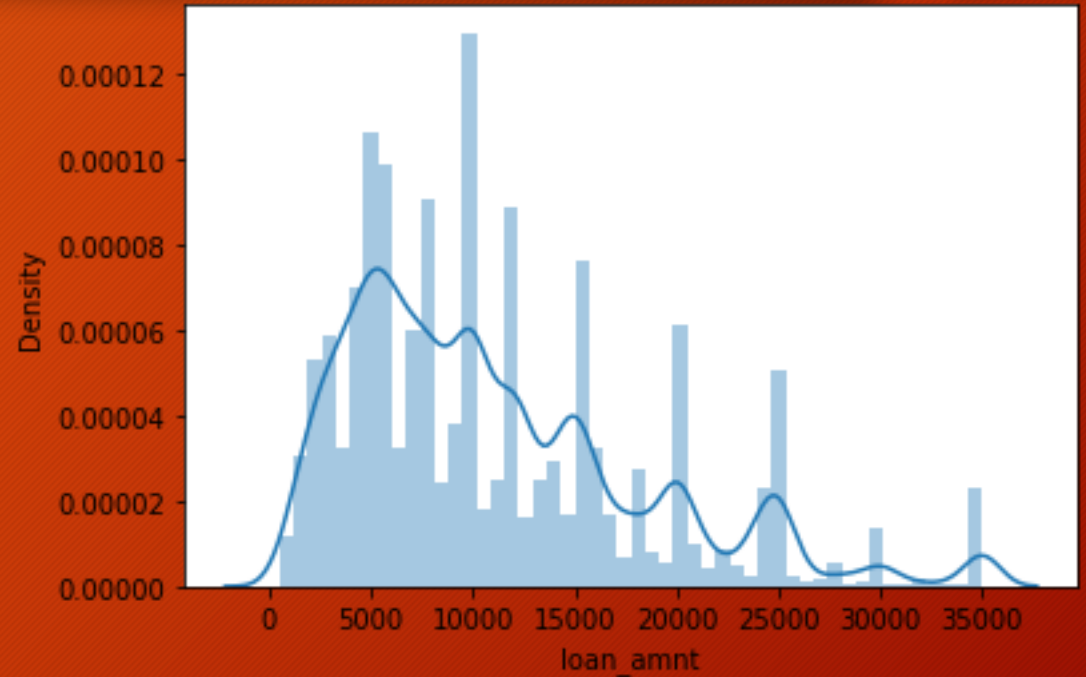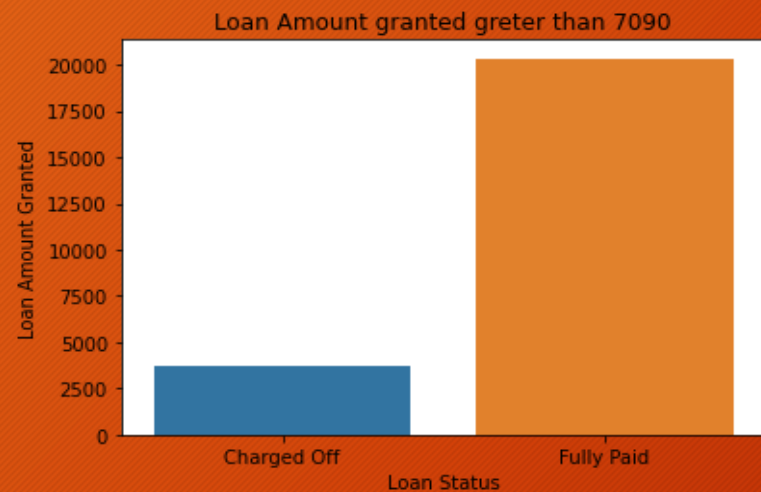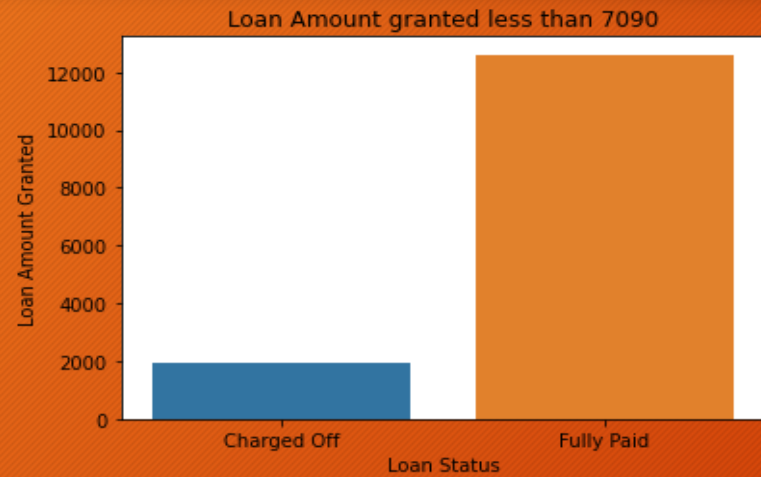
Loan Amount Analysis
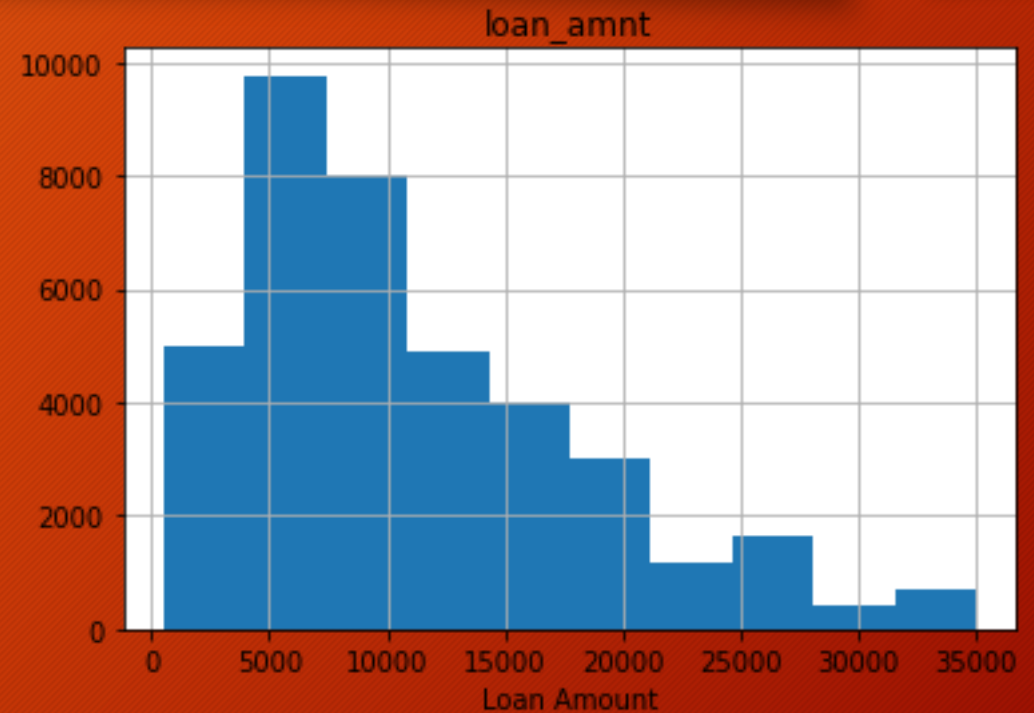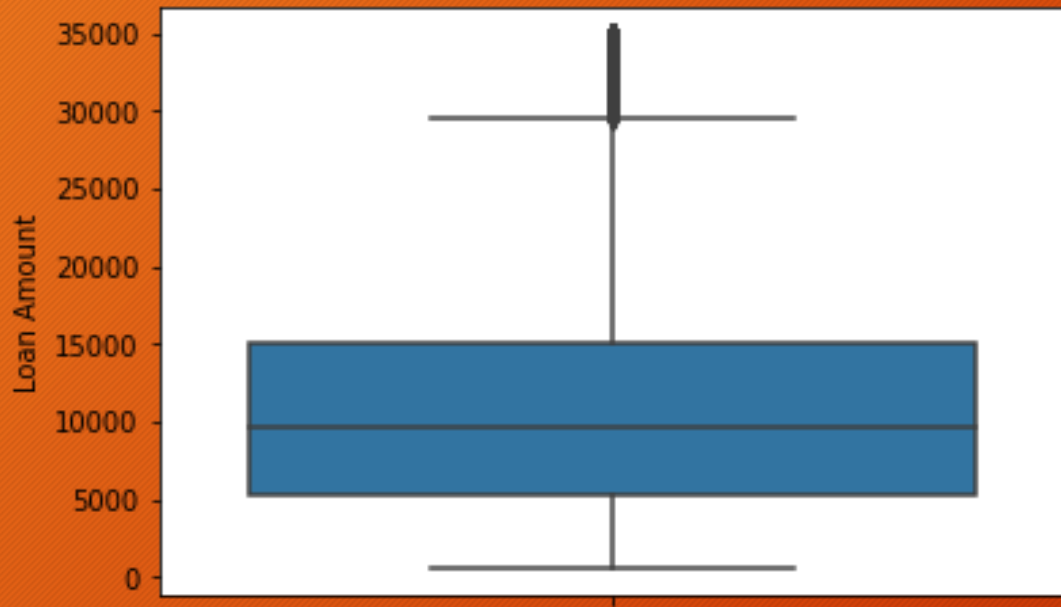
Observation
➢ Mostly loan amount is in between 5000 to 10000
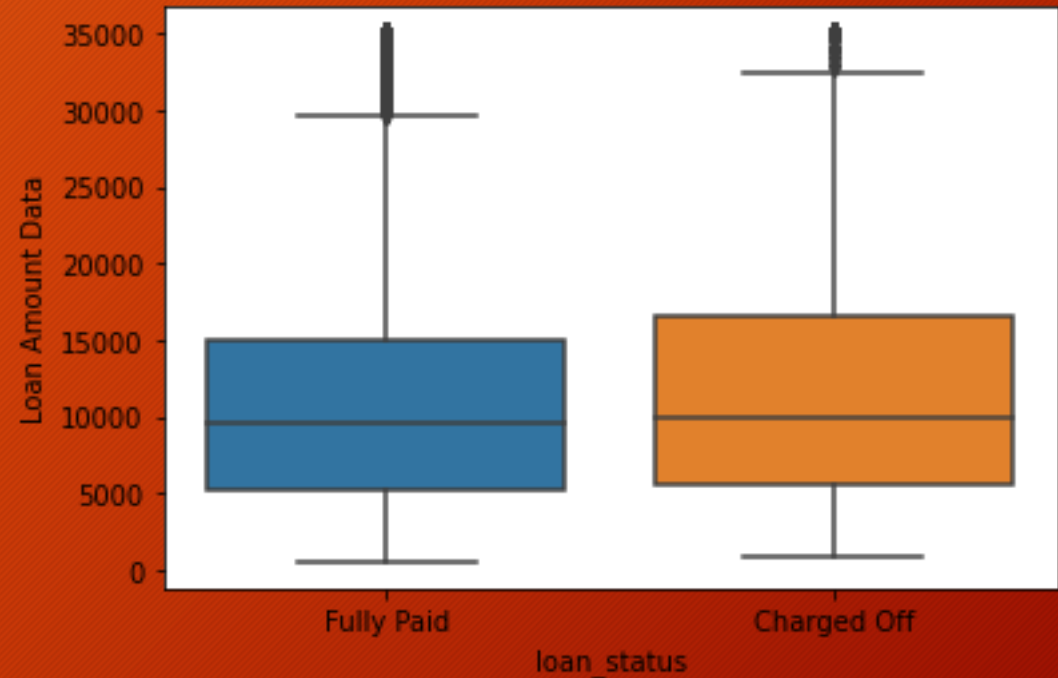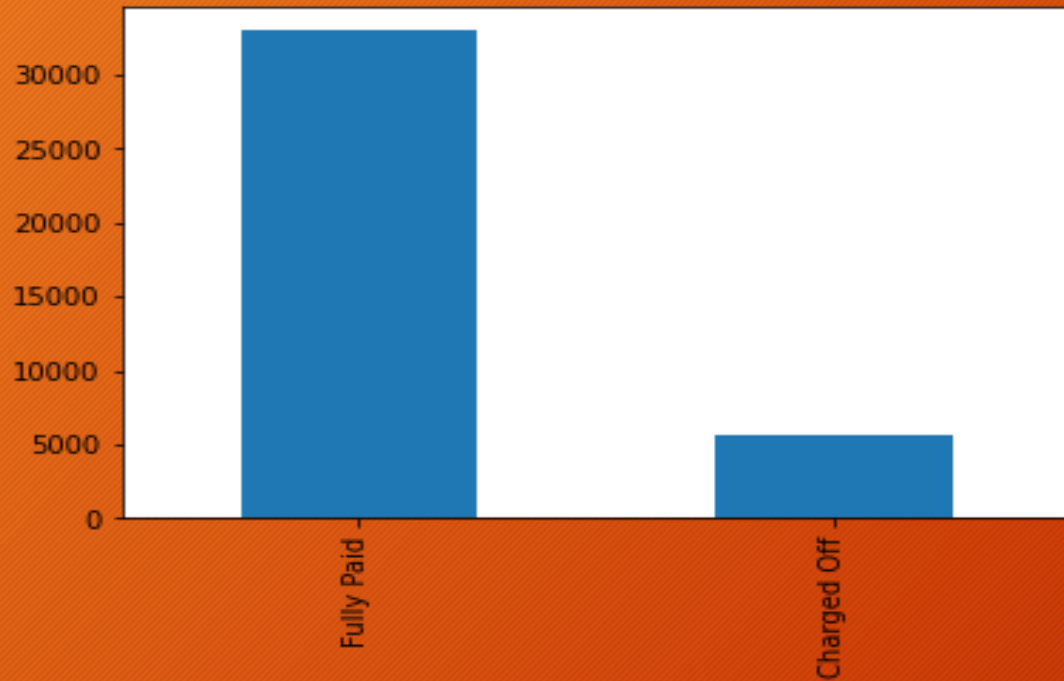➢ Loan amount mean value is 1000

Loan amount analysis

Observation
- Most of the loan amount is below 7090
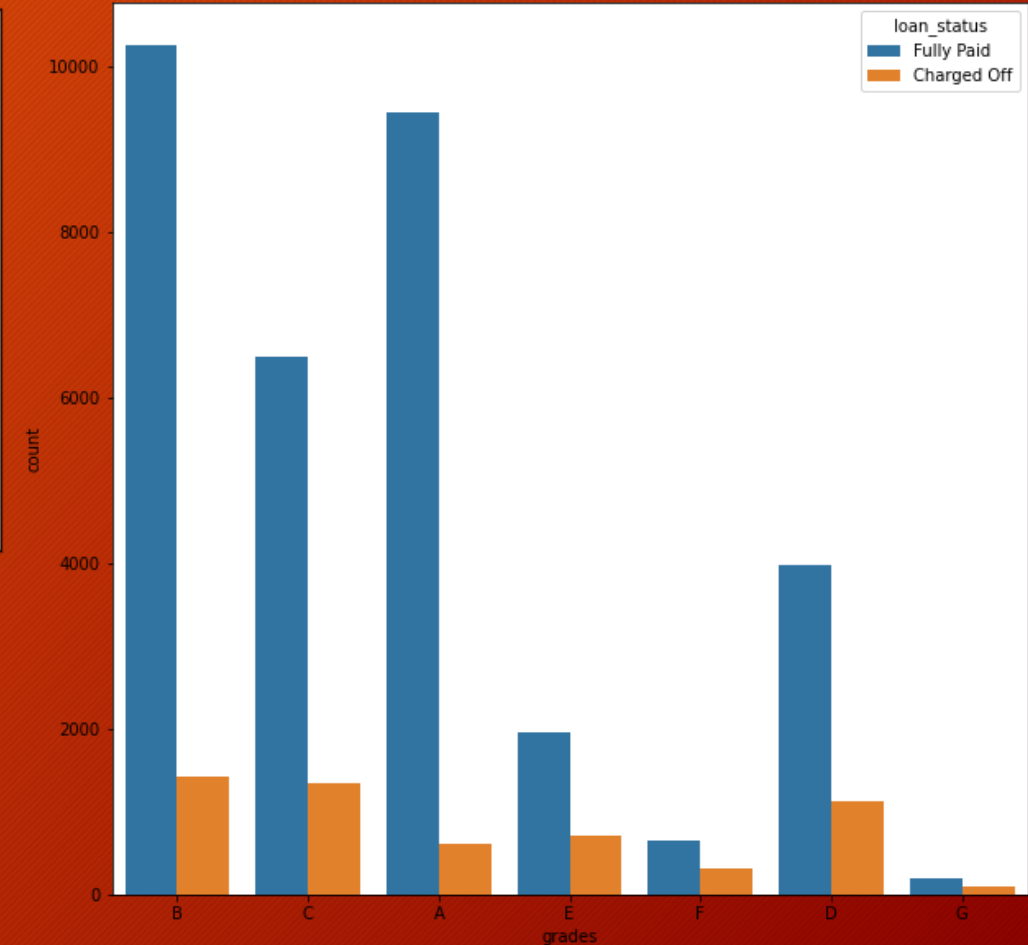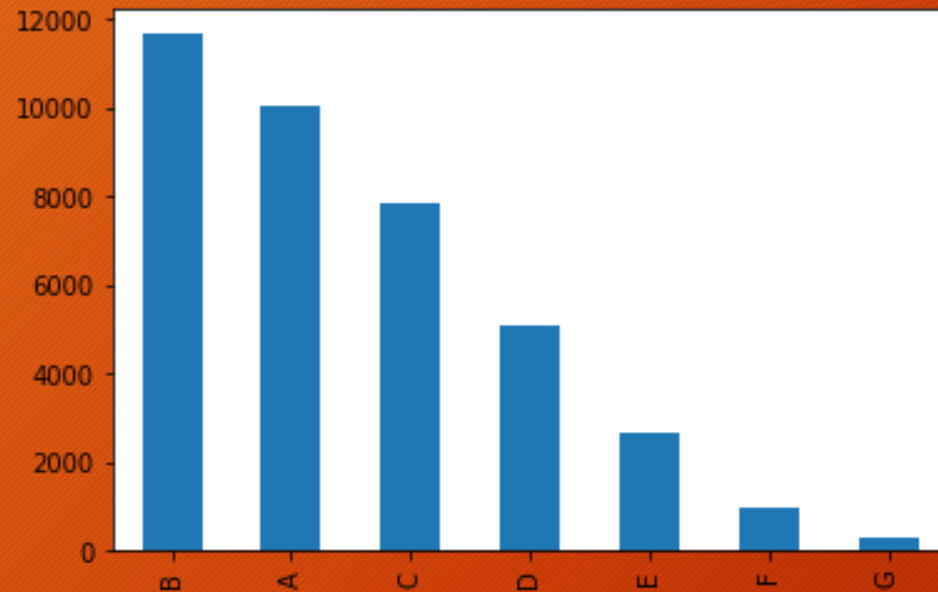- 7090 above people high chance to be defaulters

Loan Status Analysis

Observation
- Most of the loans are Fully Paid
- Nearly equal to 15% current loan status which is defaulters
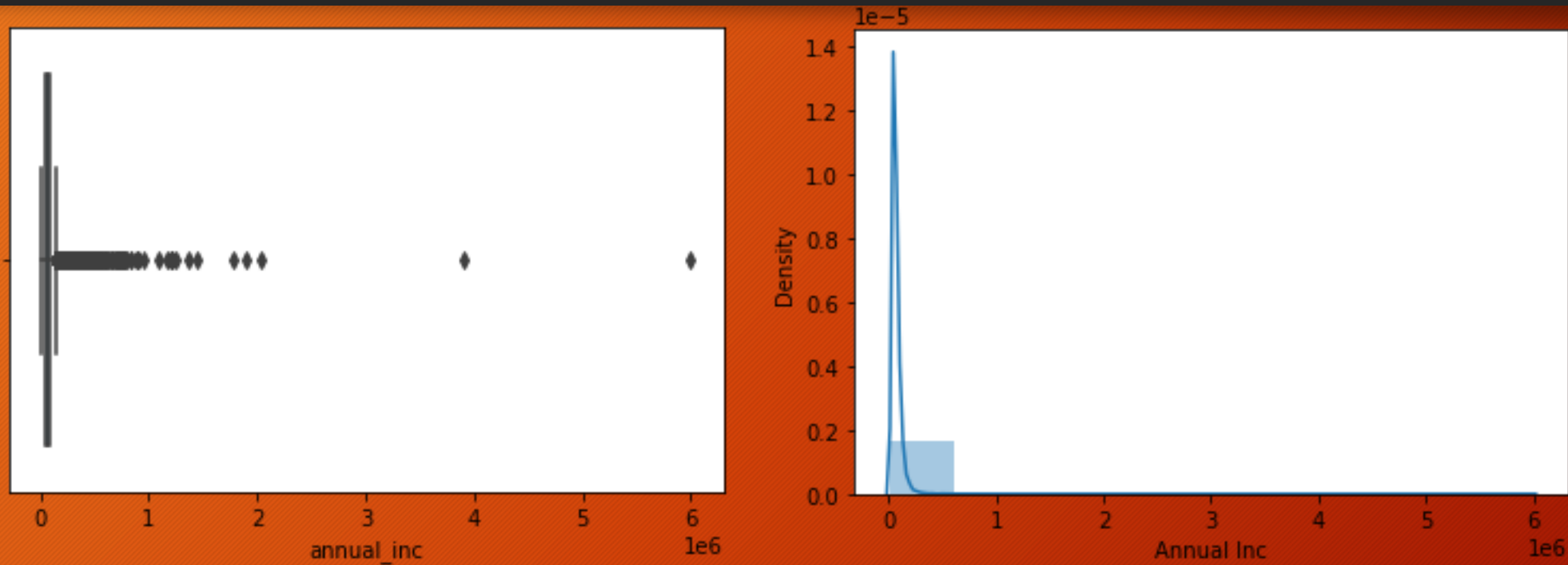- 50% percentile is all most same for both status

Loan Grades Analysis

Observation
- Mostly applicant select **B, A** grads type loan
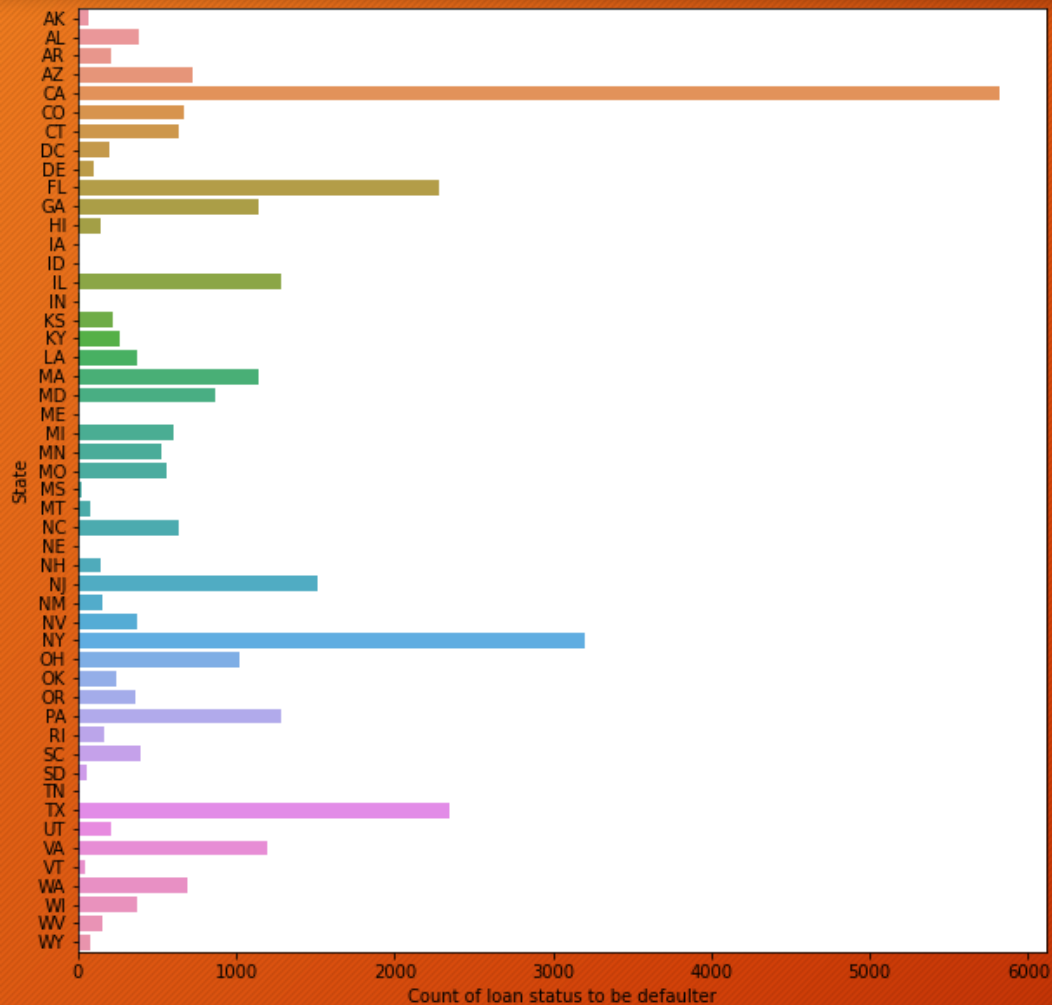- Both loan status are prefer loan **B, A**

Loan applicant annual income analysis

Observation
- Most of the applicant income in between is 0 to 1
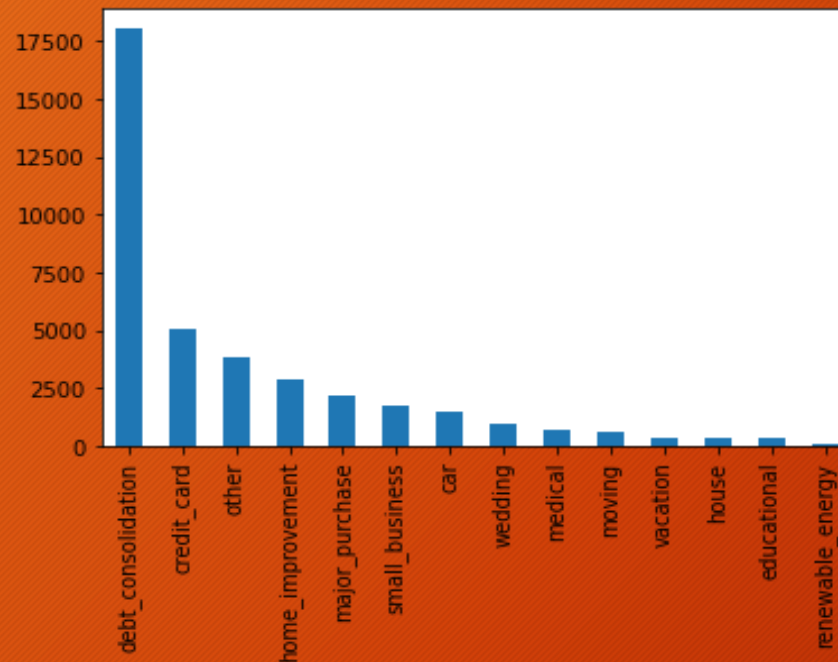- Only 5 applicant annual income is above 1.7
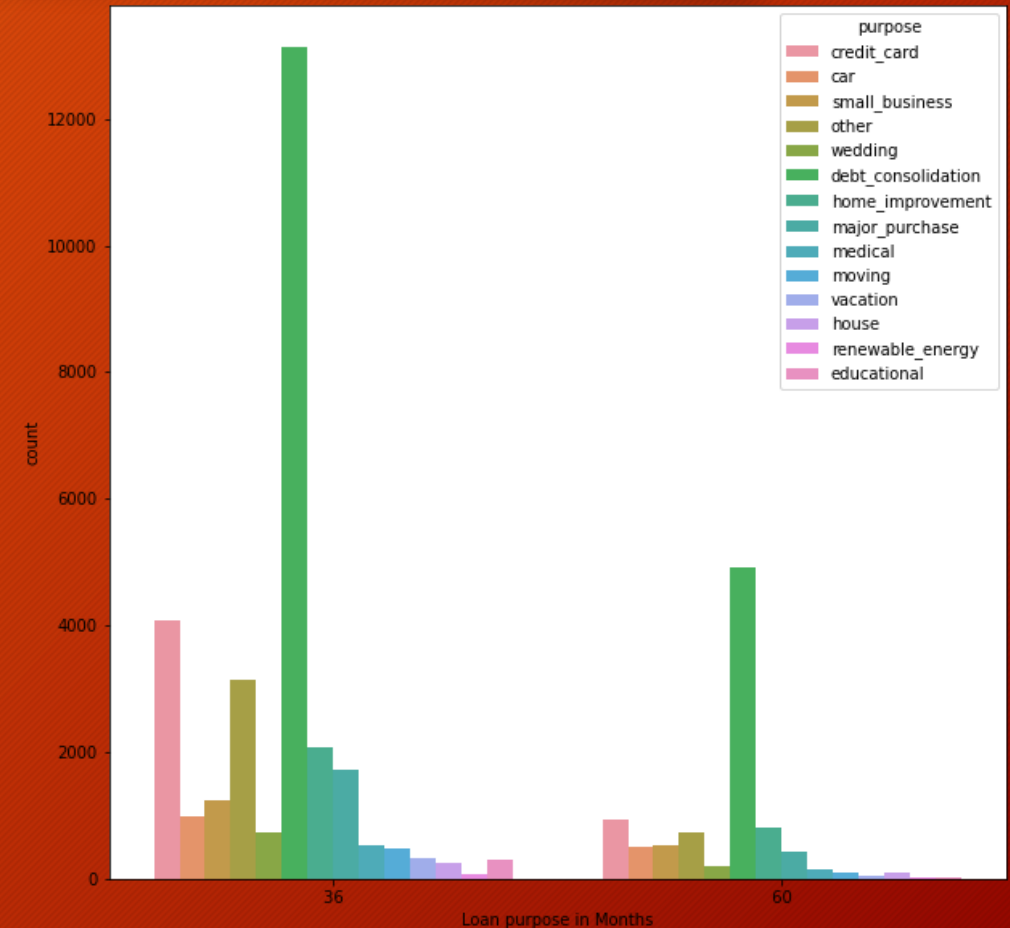
Loan State analysis

Observation
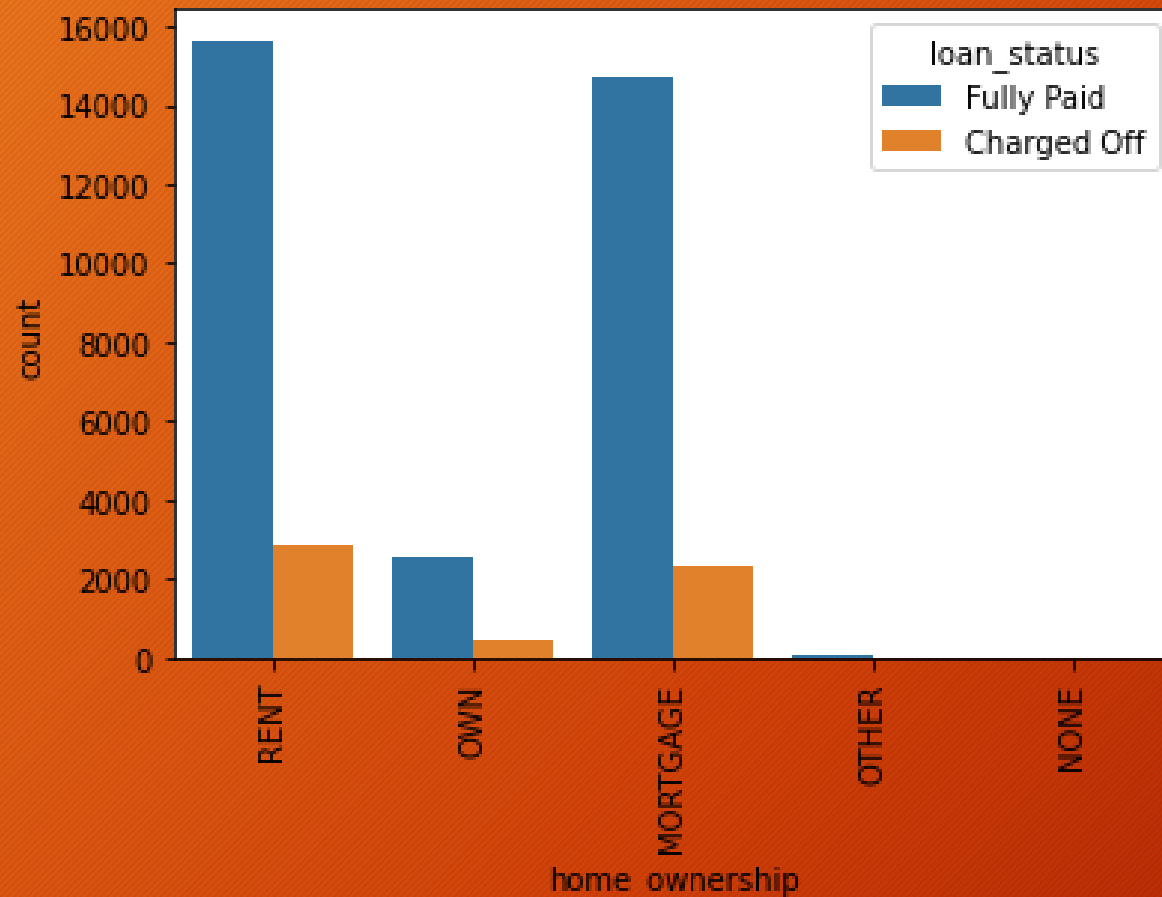- Mostly CA state applicant have chance to defaulters

Loan Purpose analysis

Observation
- Most of the applicant take a loan for **debt_consolidation**
- Most of the loan granted for 36 month
- 36 month hogh chance to be defaulters

Loan home ownership analysis

Observation
- Loan applicant who have rented home and mortgage is all most same and that type of applicant high chance to be defaulters

Conclusion

- Low grade have high chance to be defaulters.
- Who applicant belong to CA state those have high chance to be defaulters.
- Majorly applicant applying loan for **debt_consolidation** those people have high chance to be defaulters.
- Rented and mortgage home people high chance to defaulters

Thank you