

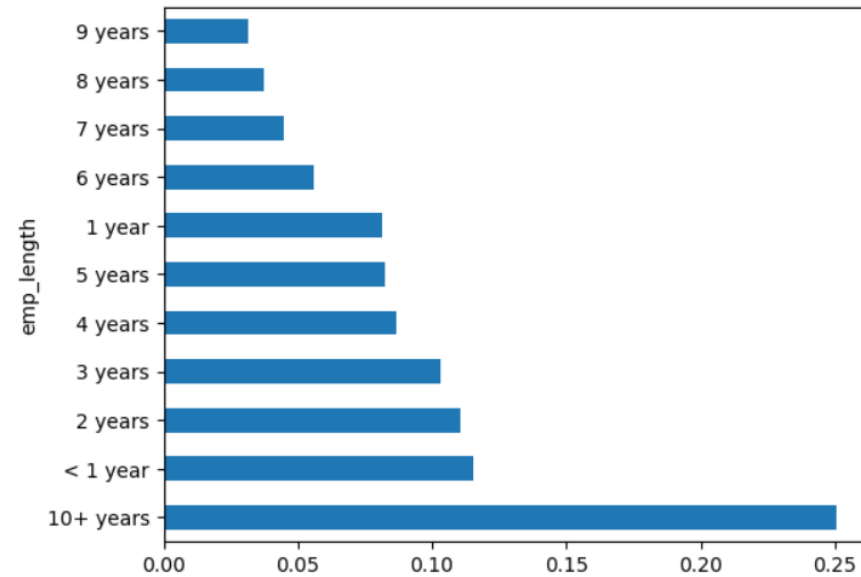
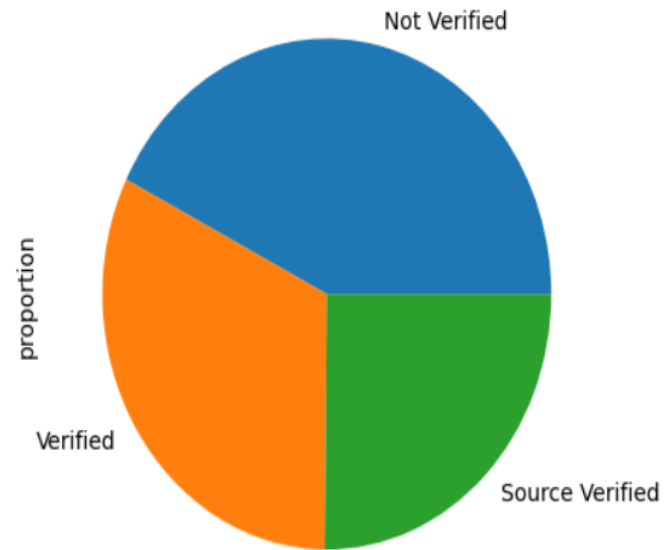
Lending club case study

Data handling

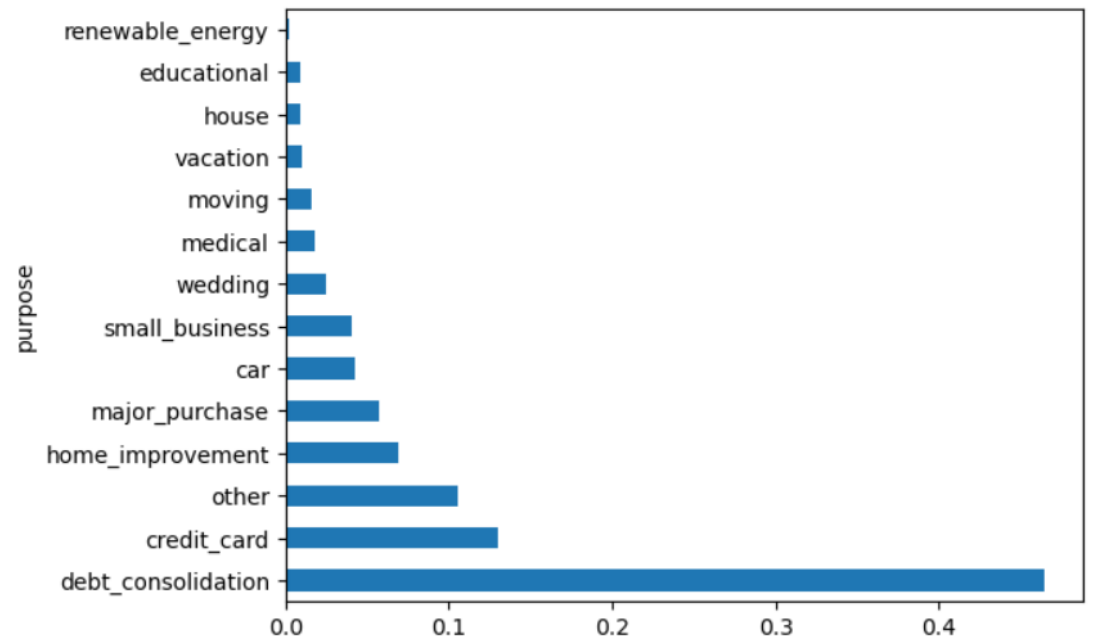
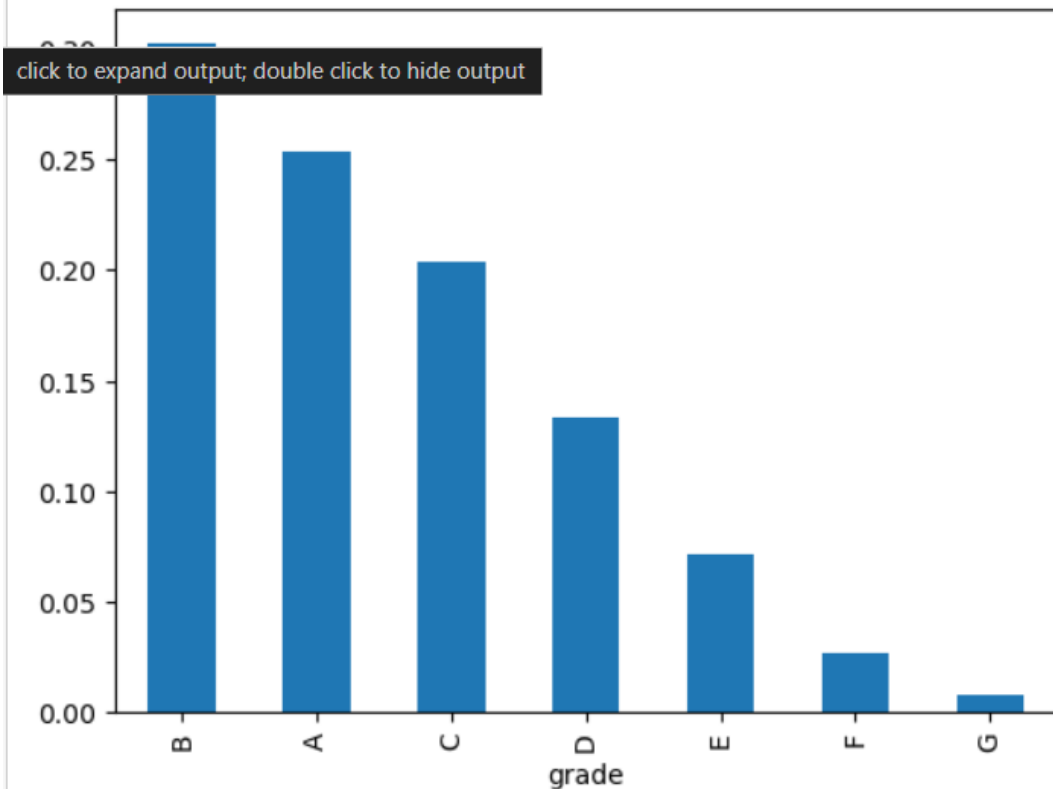
- Importing the data and checking the data variables.
- Knowing about data using describe statement.
- Checking the missing value count and removing the missing values columns, if the missing value count is more than 40%.
- Dropping columns not necessary for analysis.
- Imputing the missing values using different techniques.
- Removing the signs from the values.
- Finding the outliers: loan_amount, funded_amount, annual_inc.
- Creating bins for easy imputation.

Univariate analysis

- Most of the employees having 10+ years of experiences
- Not verified accounts having the more portions, these is the one of the factors for defaulting.



Univariate analysis

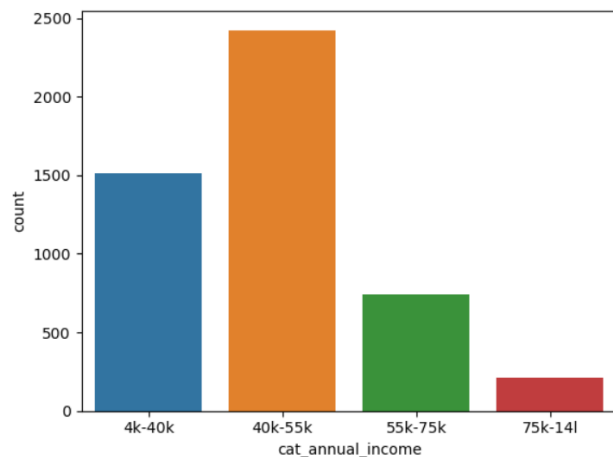


Bi-variate analysis

- Mostly charged off are having salary range of 40k-55k
- Charged off mostly having 9-15% of interest rate

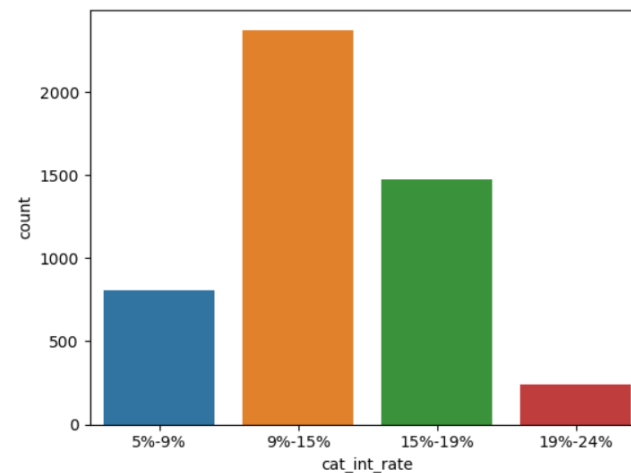
```
] sns.countplot(x='cat_annual_income', data=df[df.loan_status == 'Charged Off'])
```

```
] <Axes: xlabel='cat_annual_income', ylabel='count'>
```

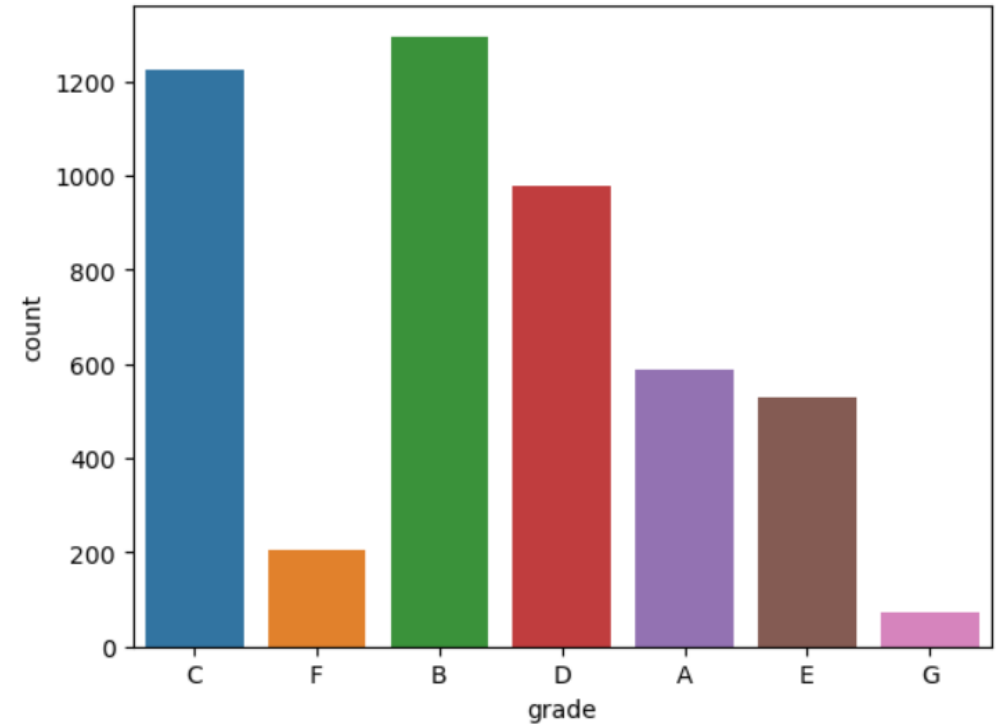
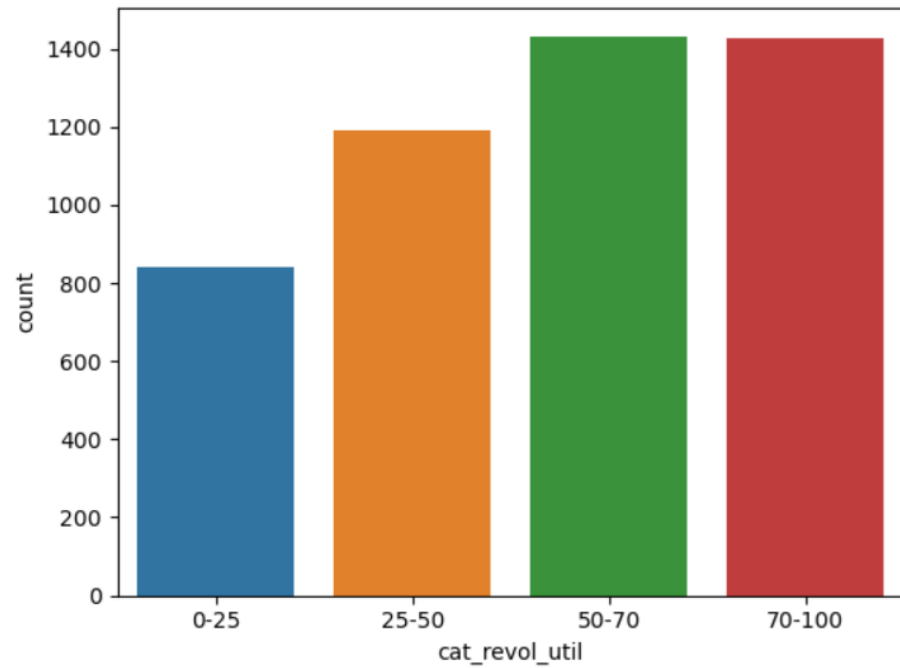


```
sns.countplot(x='cat_int_rate', data=df[df.loan_status == 'Charged Off'])
```

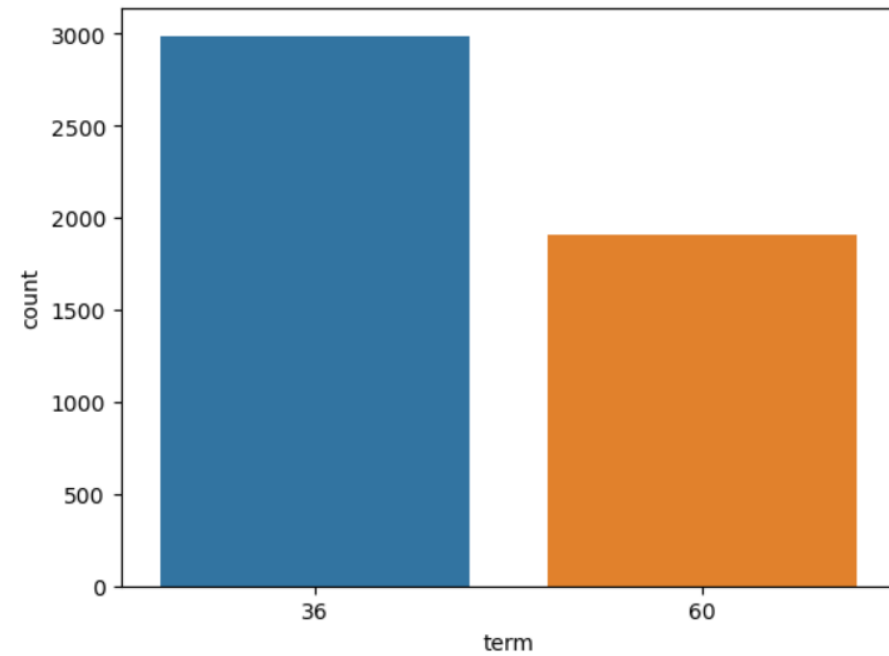
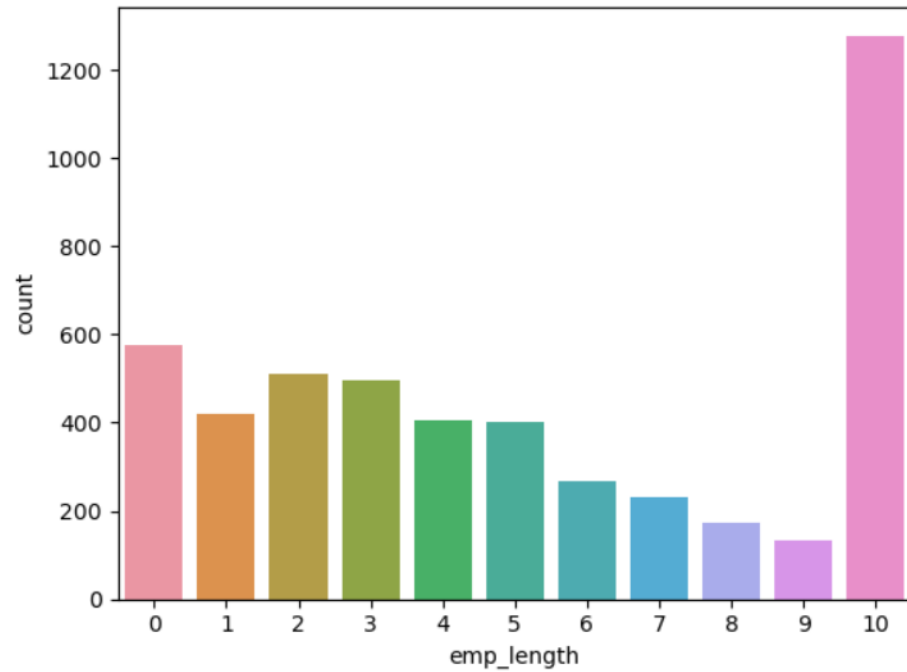
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<Axes: xlabel='cat_int_rate', ylabel='count'>
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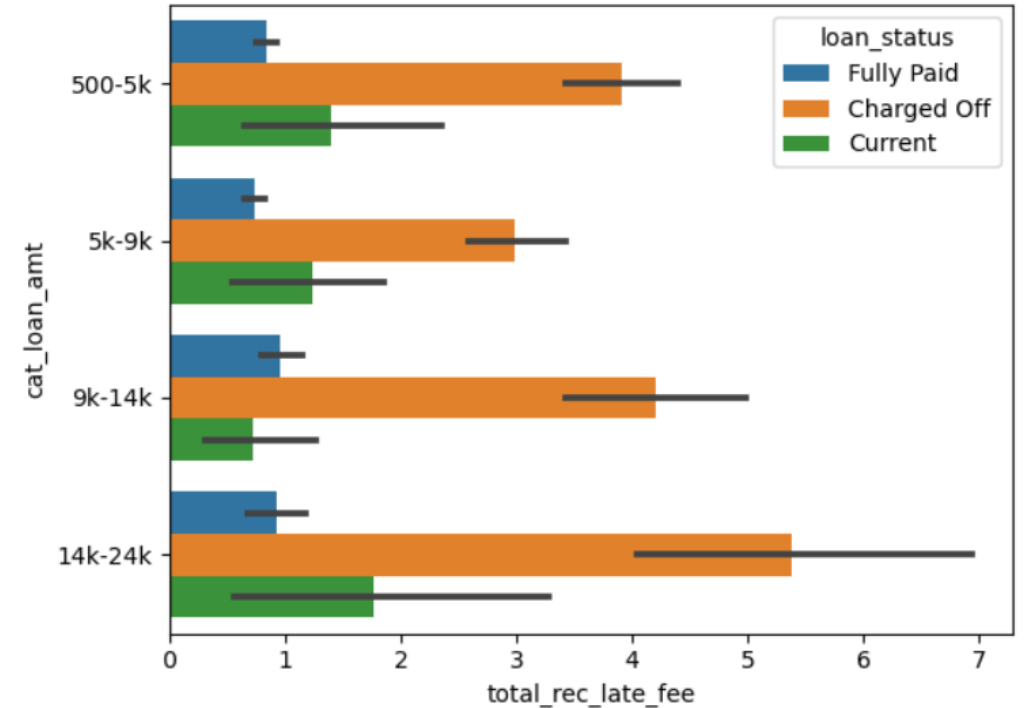
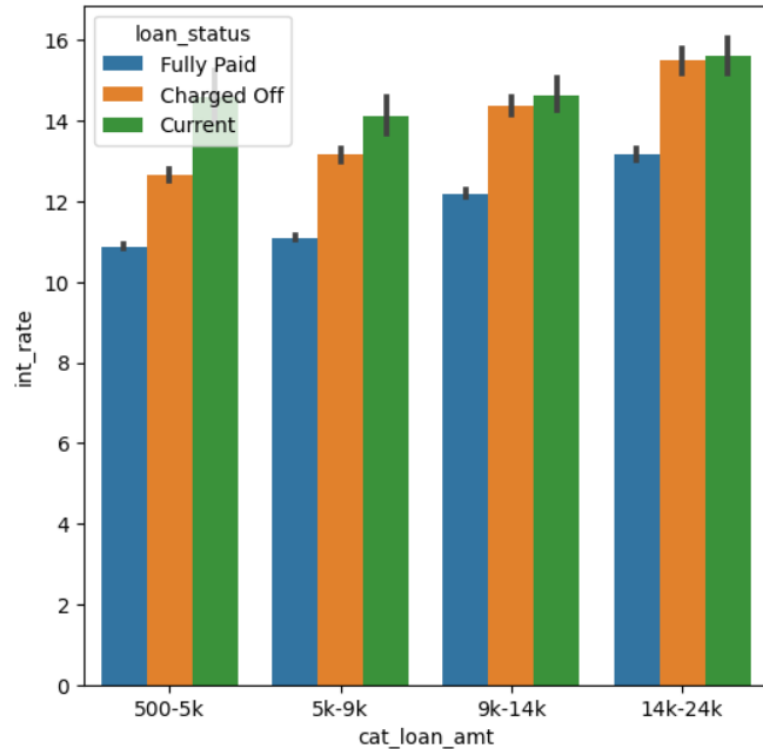
Bi-variate analysis



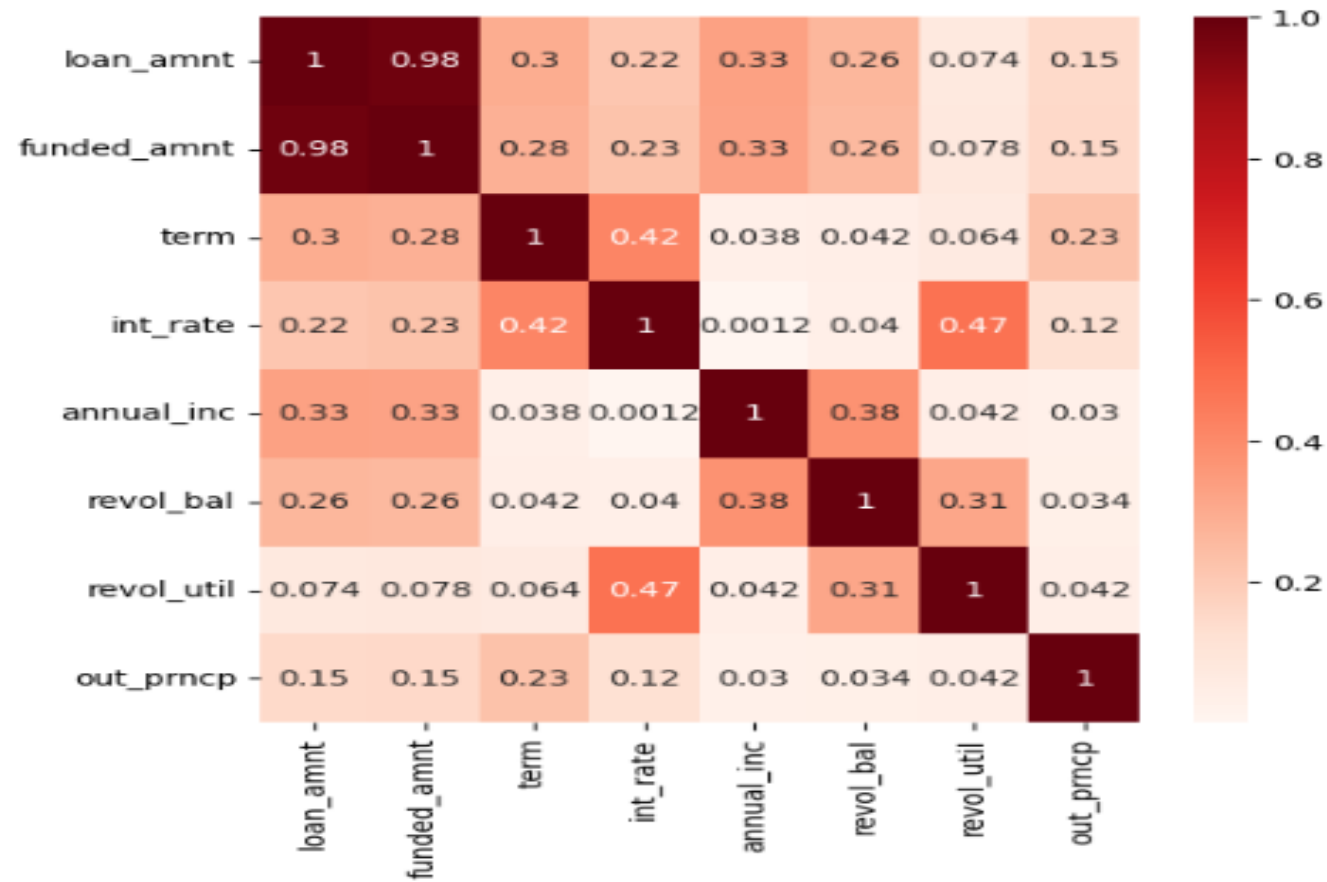
Bi-variate analysis



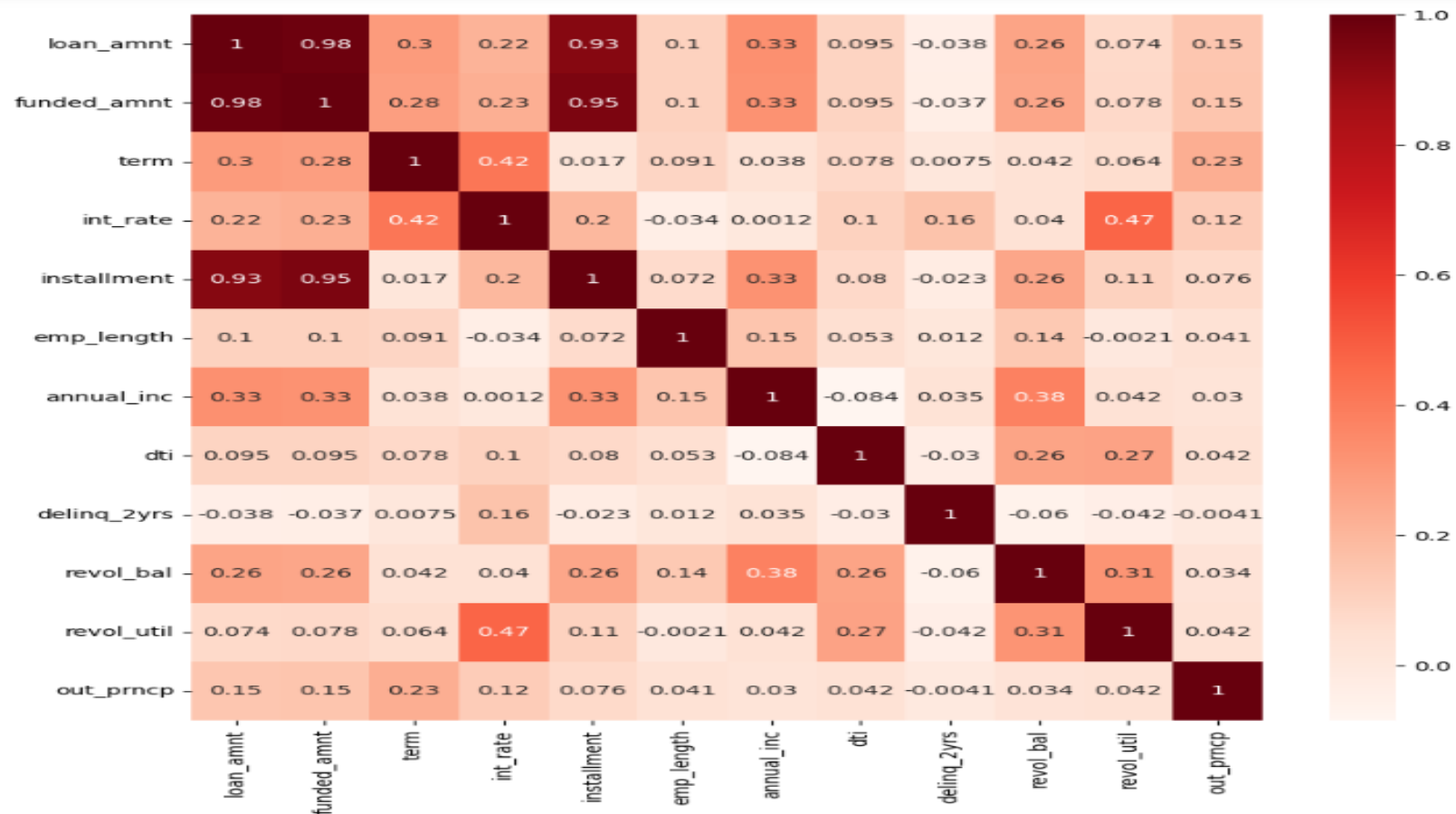
Multi variate analysis



Multi-variate analysis



Multi-variate analysis



Driver-Variables

Percentage of not
verified customers
is more than
verified .

Emp_length is
having more than
10+ years'
experience

Salary between the
40k-55k

Revol_util is range
between 70-100

B grade
customers

Loan amount
between 14k-24k

