Lending Club loan project ▶

Project Objective

1.Predict whether a loan will be approved based on applicant details.

2.Helps banks automate and speed up decisions.

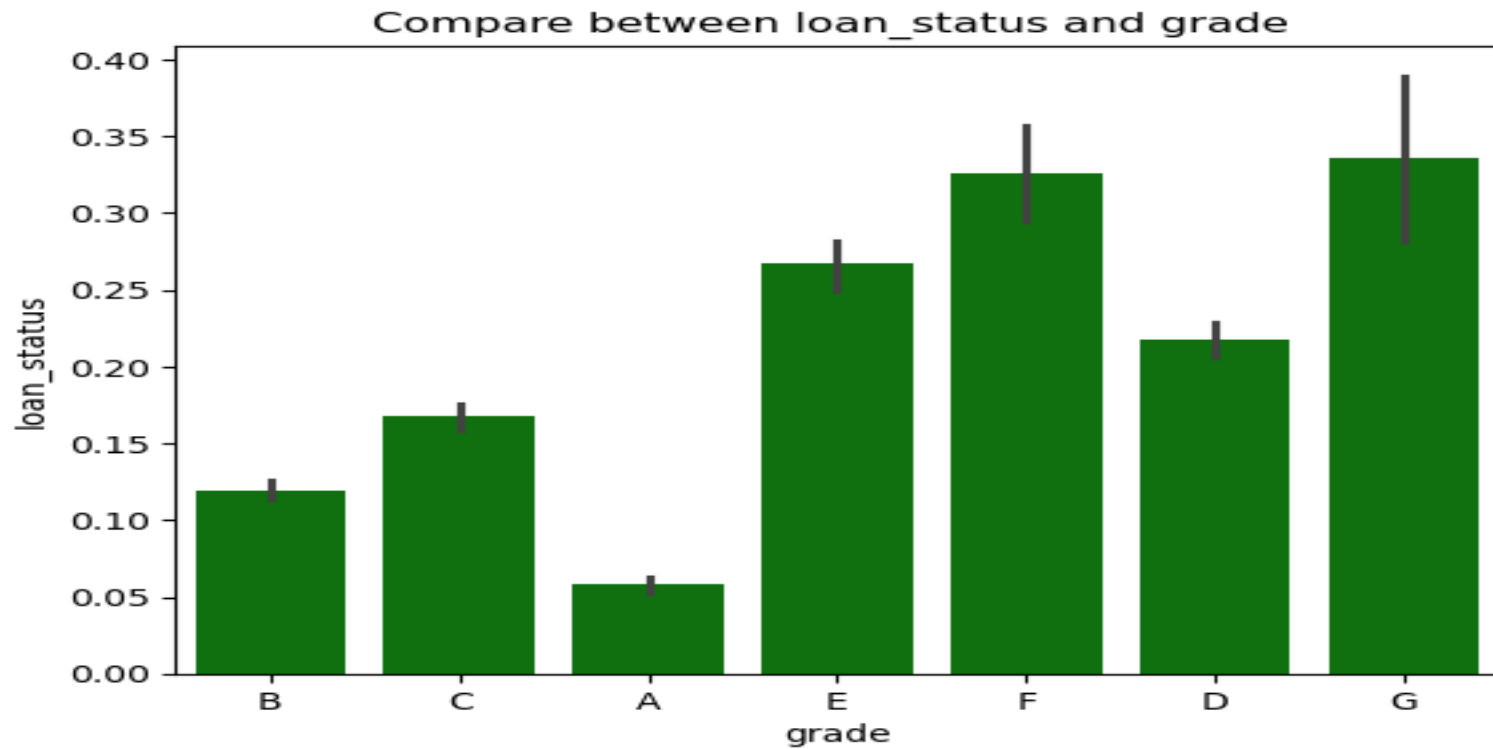3.We will use library of phytons like numpy,pandas ,matplotlib and seaborn.

4.Main thing to find the answer of Loan_Status so,decision making can be more fast for lending club(loan bank).

5.Will also clean the data , understand the data , analysis the data with some command and graph chart and more analysis so that will easy to understand and easy in decision making.
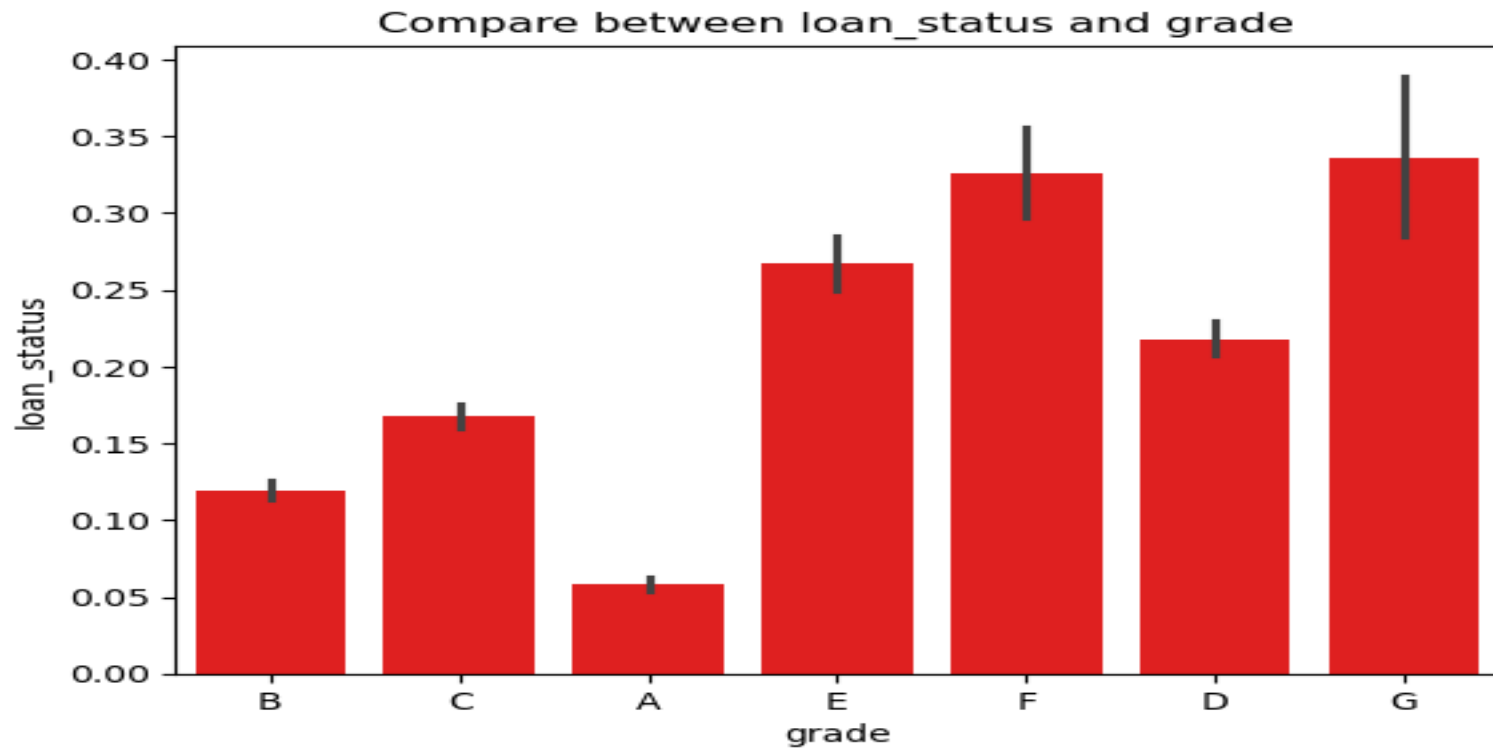
Dataset Overview

- Features in dataset include:

  - Applicant details: Gender, Marital Status, Education, Income

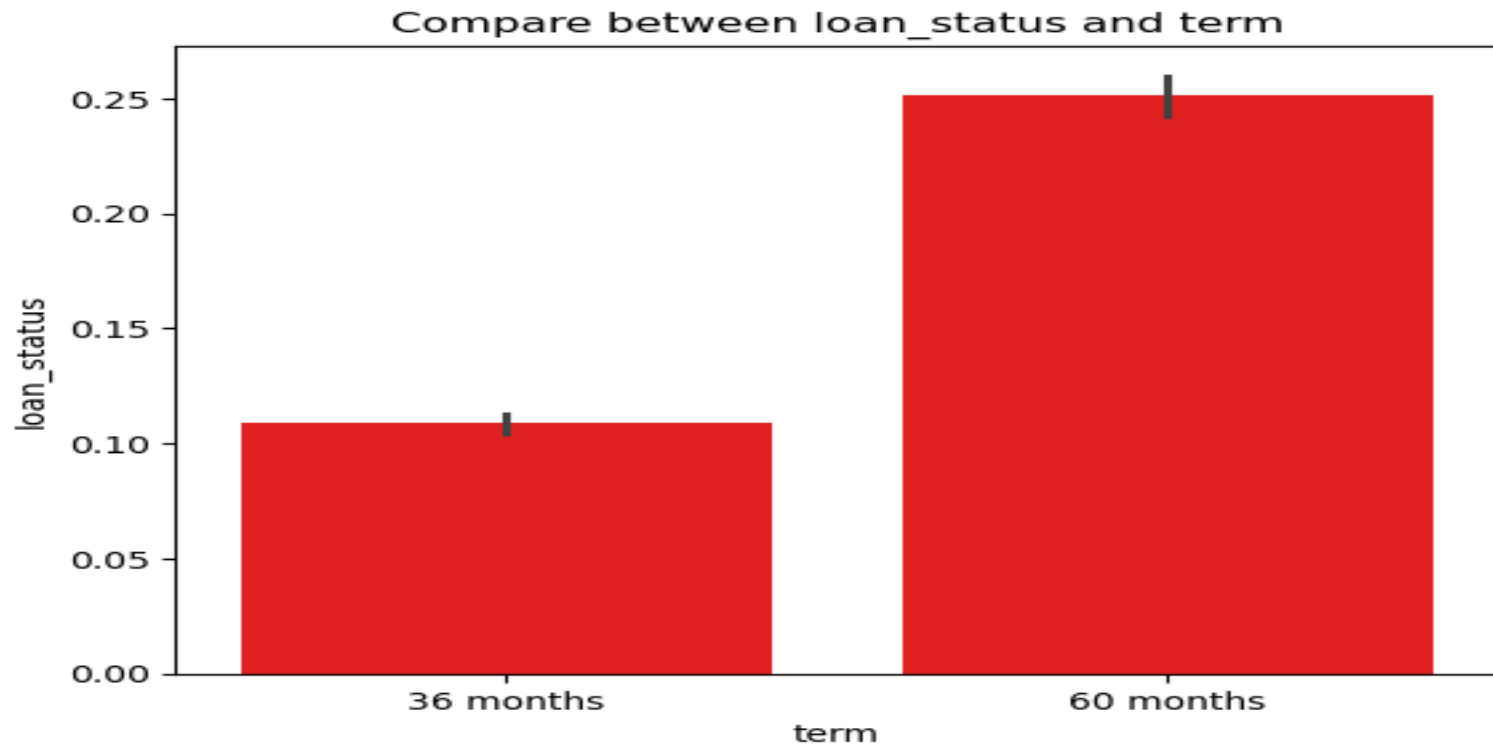 - Loan details: Amount, Term, Credit History

  - Target: Loan_Status

Compare between loan_status and grade

Explain:
Graph shows the comparison between loan_status and grade.
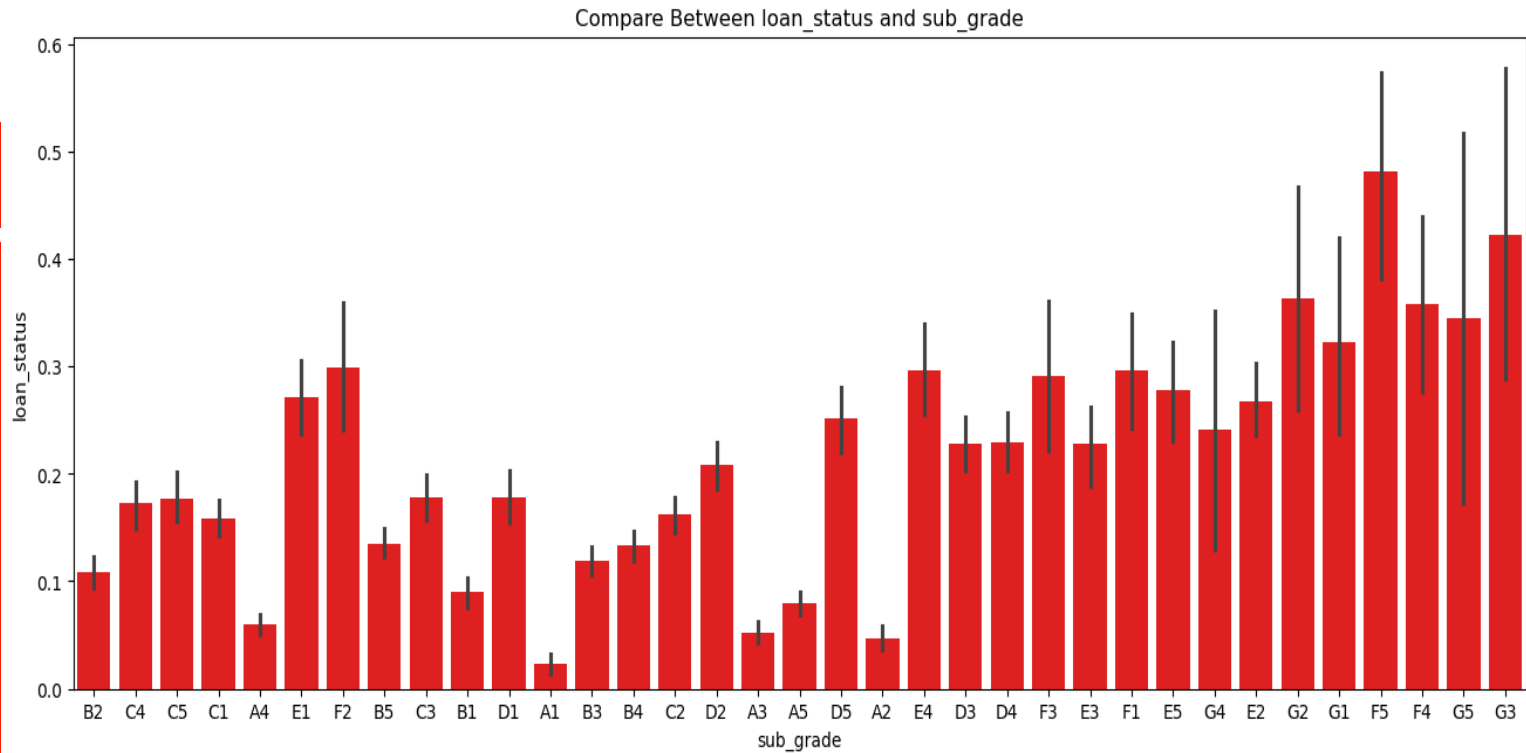
Compare between loan_status and grade

Explain:
Graph shows that the comparison between the loan_status and grade Just the visualization is different but the comparison is same.
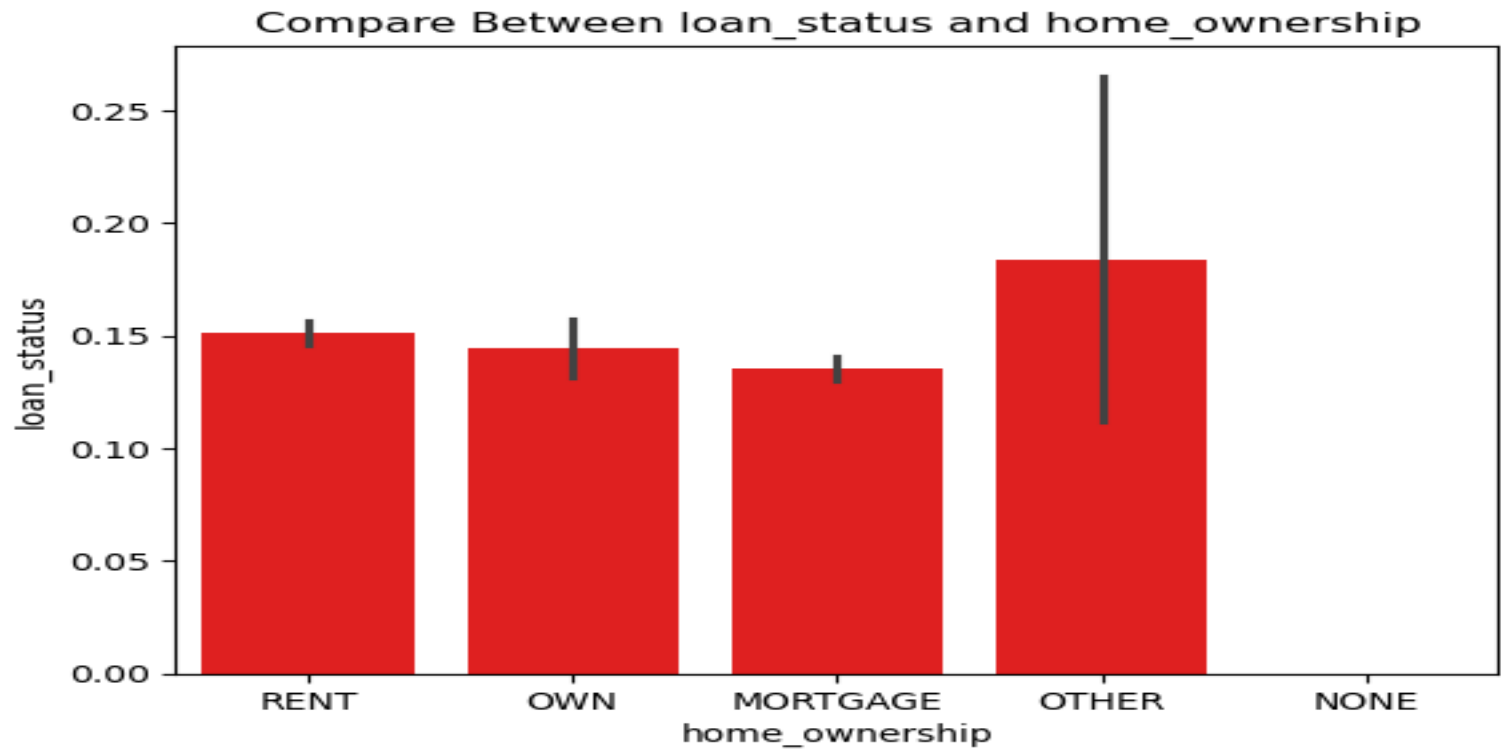
Compare between loan_status and term

Explain:
Graph shows comparison between loan_status and term of the bank.
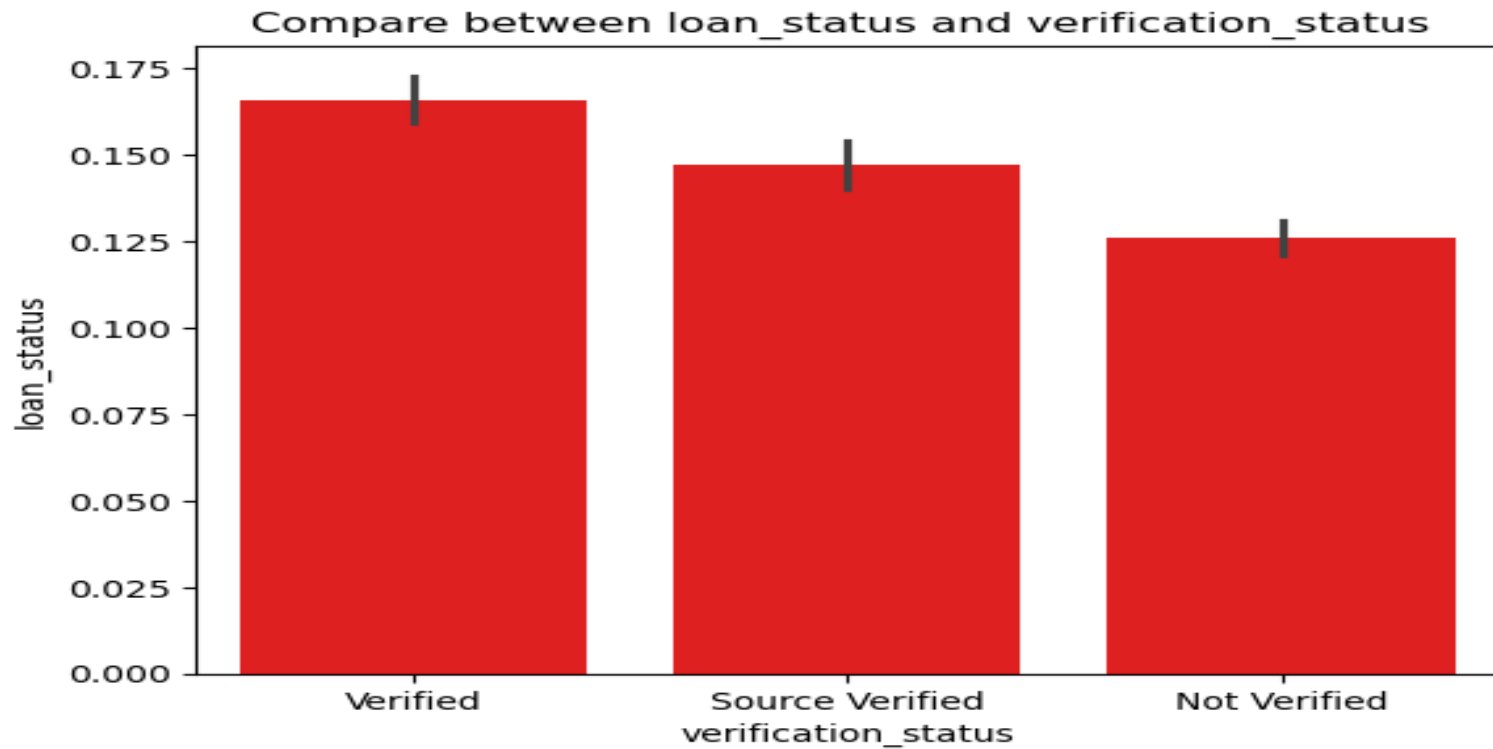And the visualization is also different for a better explanation .

Compare Between loan_status and sub_grade

Explain:
This graph show the comparison between loan_status and sub_grade
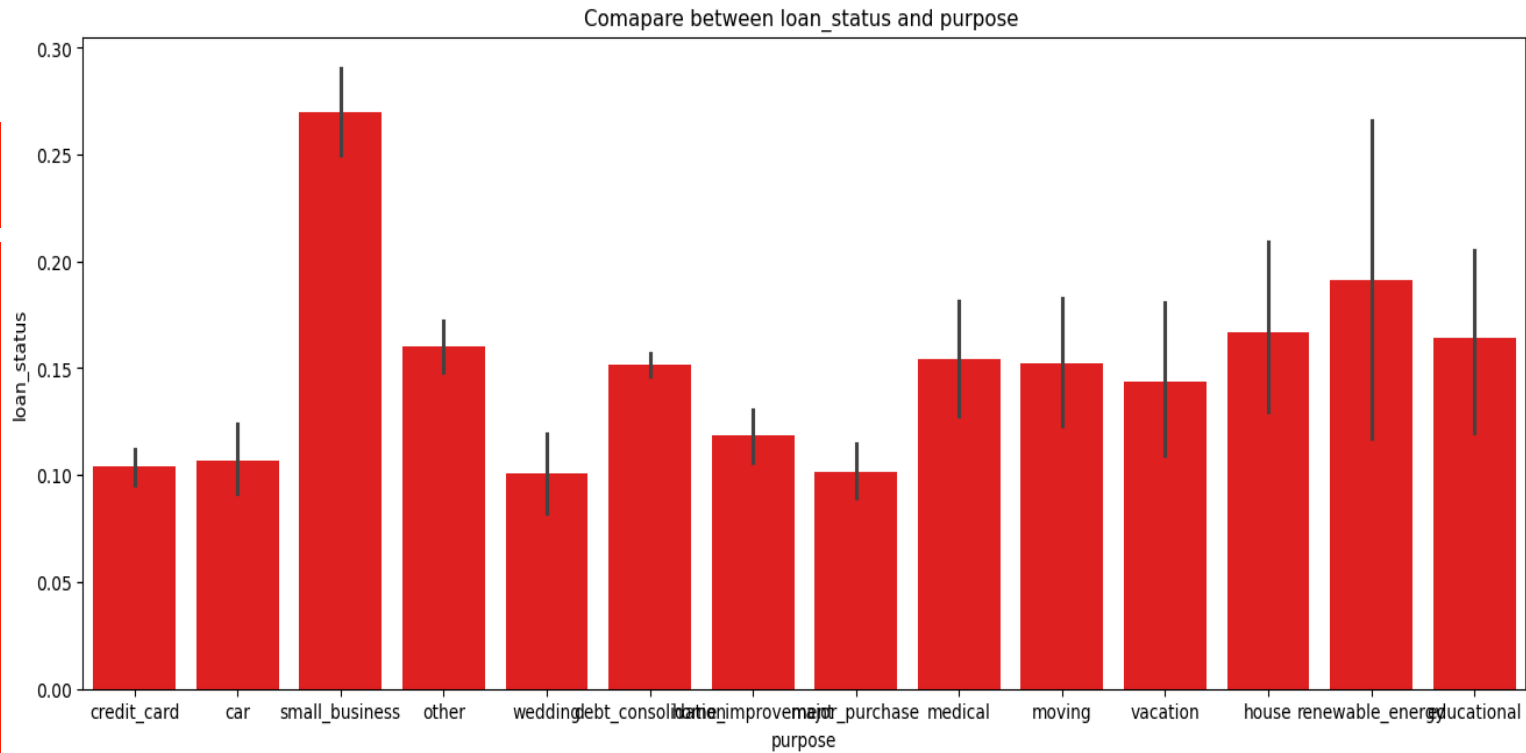And the visualization is for a better explanation.

Compare Between loan_status and home_ownership

Explain:
This graph show the comparison between loan_status and home_ownershi
And the visualization is for a better explanation.

Compare between loan_status and verification_status

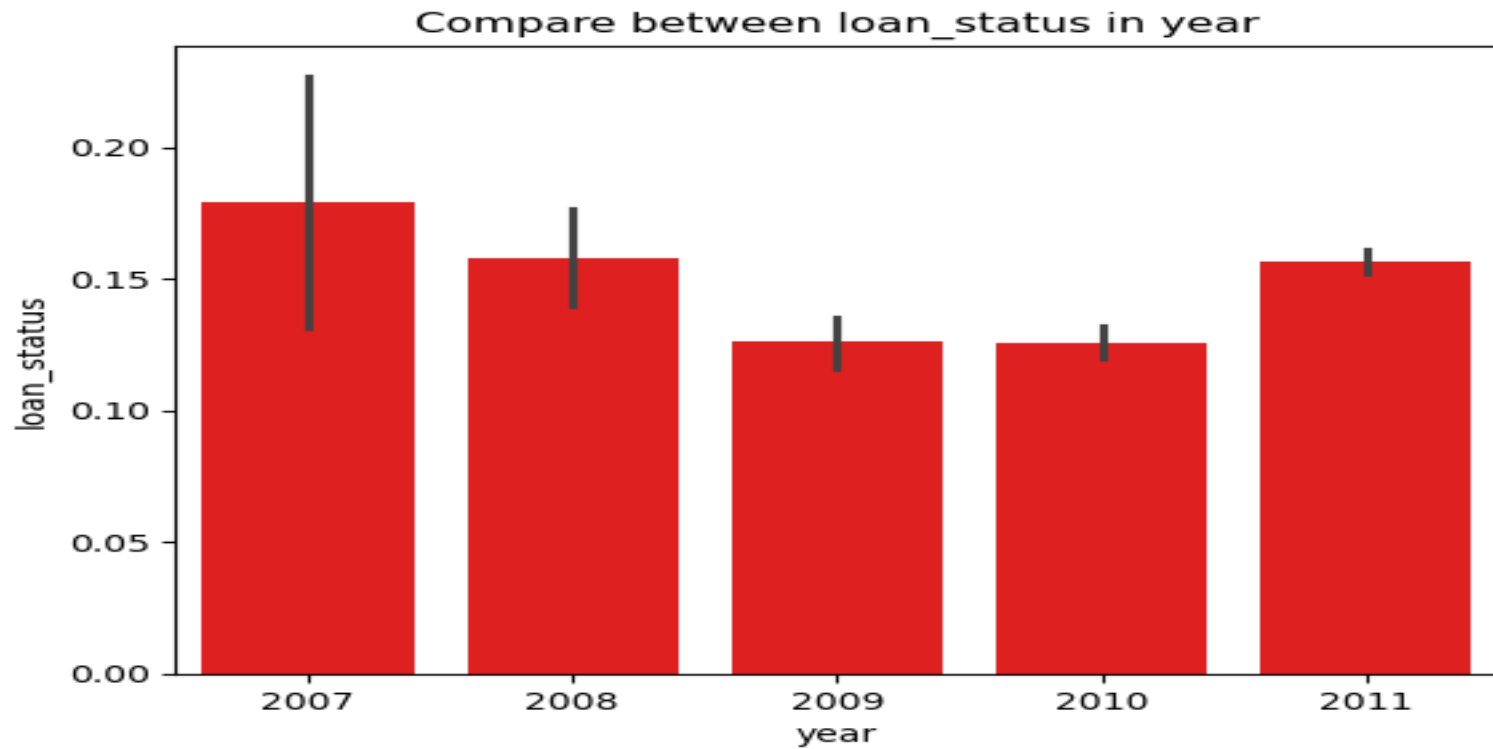Explain:
This graph show the comparison between loan_status and verification_status.
And the visualization is for a better explanation.

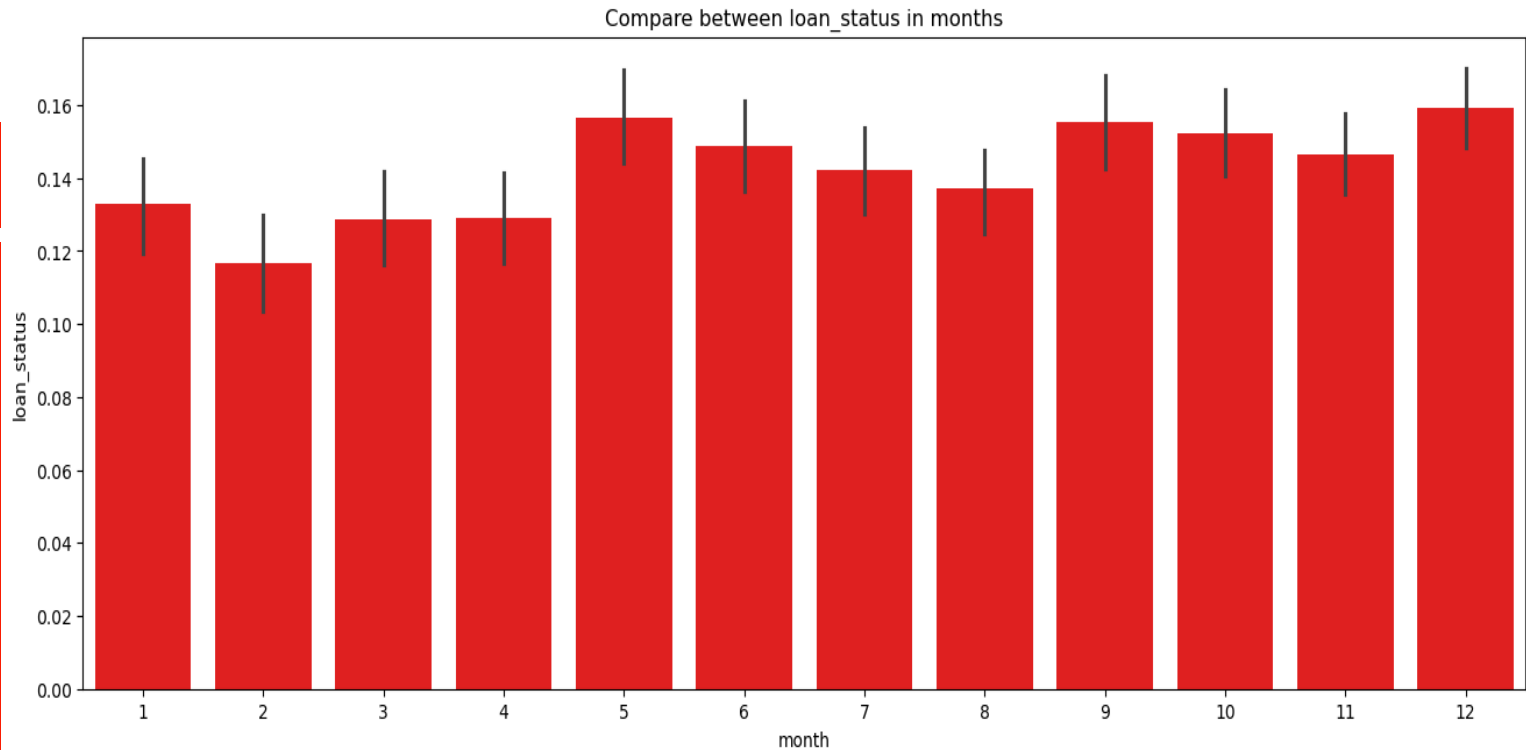Comapare between loan_status and purpose

Explain:
This graph show the comparison between loan_status and purpose.
And the visualization is for a better explanation.

Compare between loan_status in year

Explain:
This graph show the comparison between loan_status and year.
And the visualization is for a better explanation.
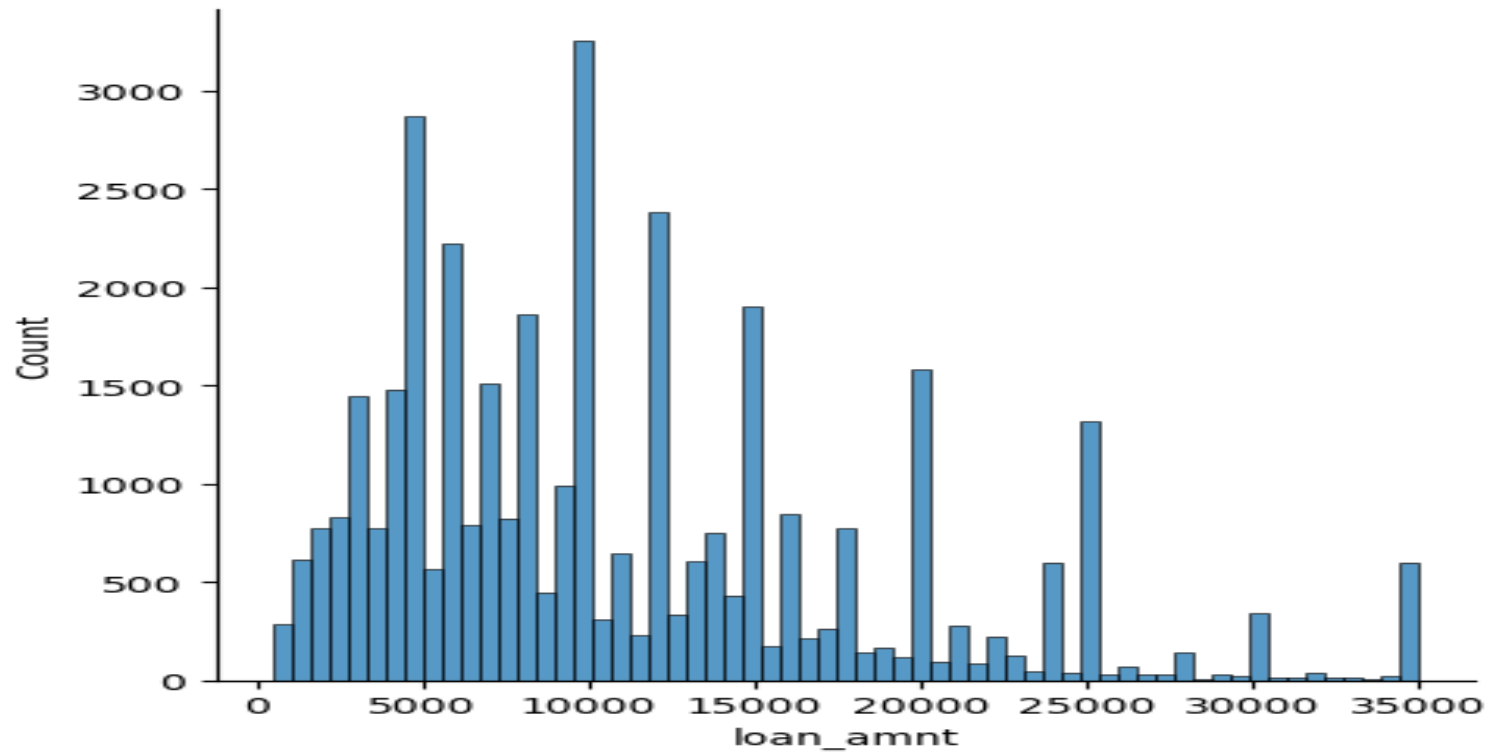
Compare between loan_status in months
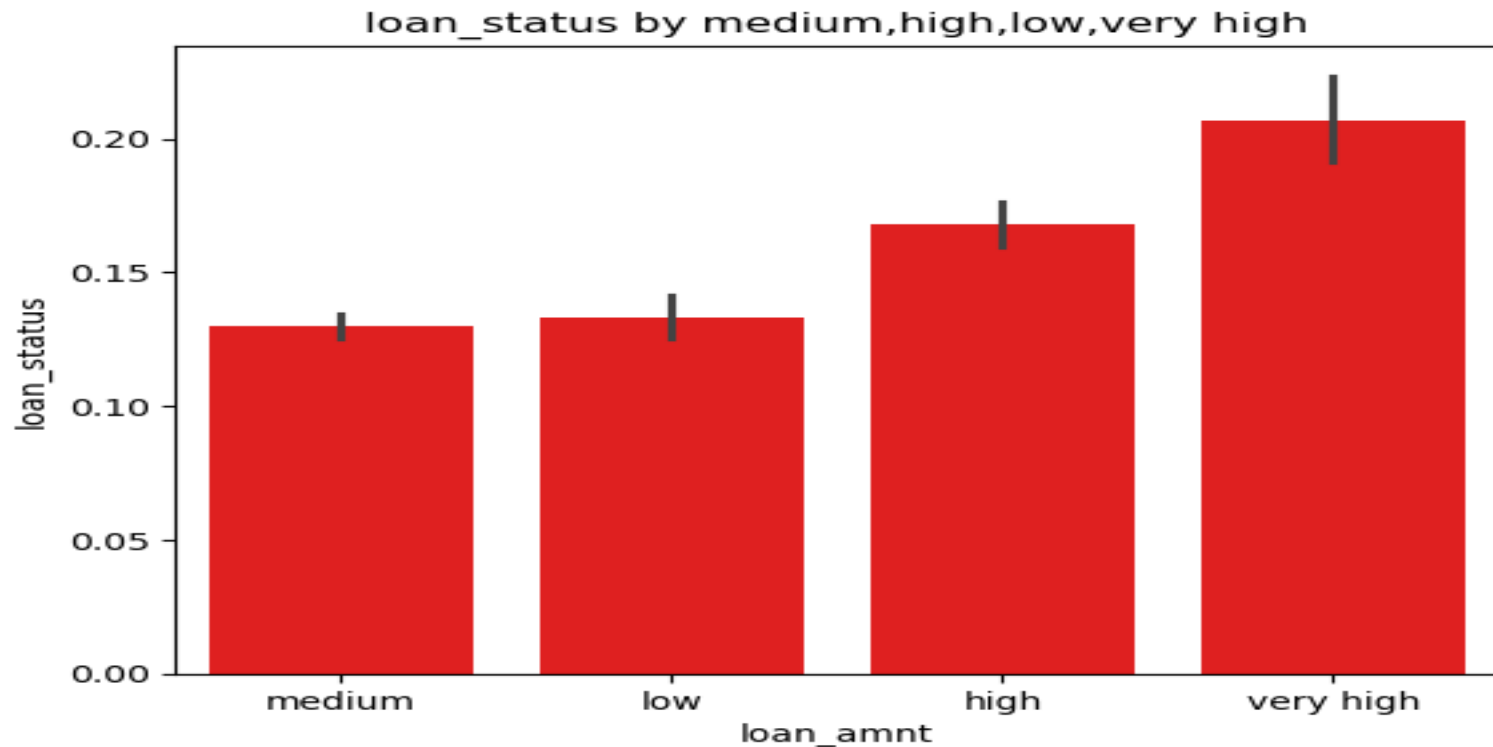
Explain:
This graph show the comparison between loan_status and month.
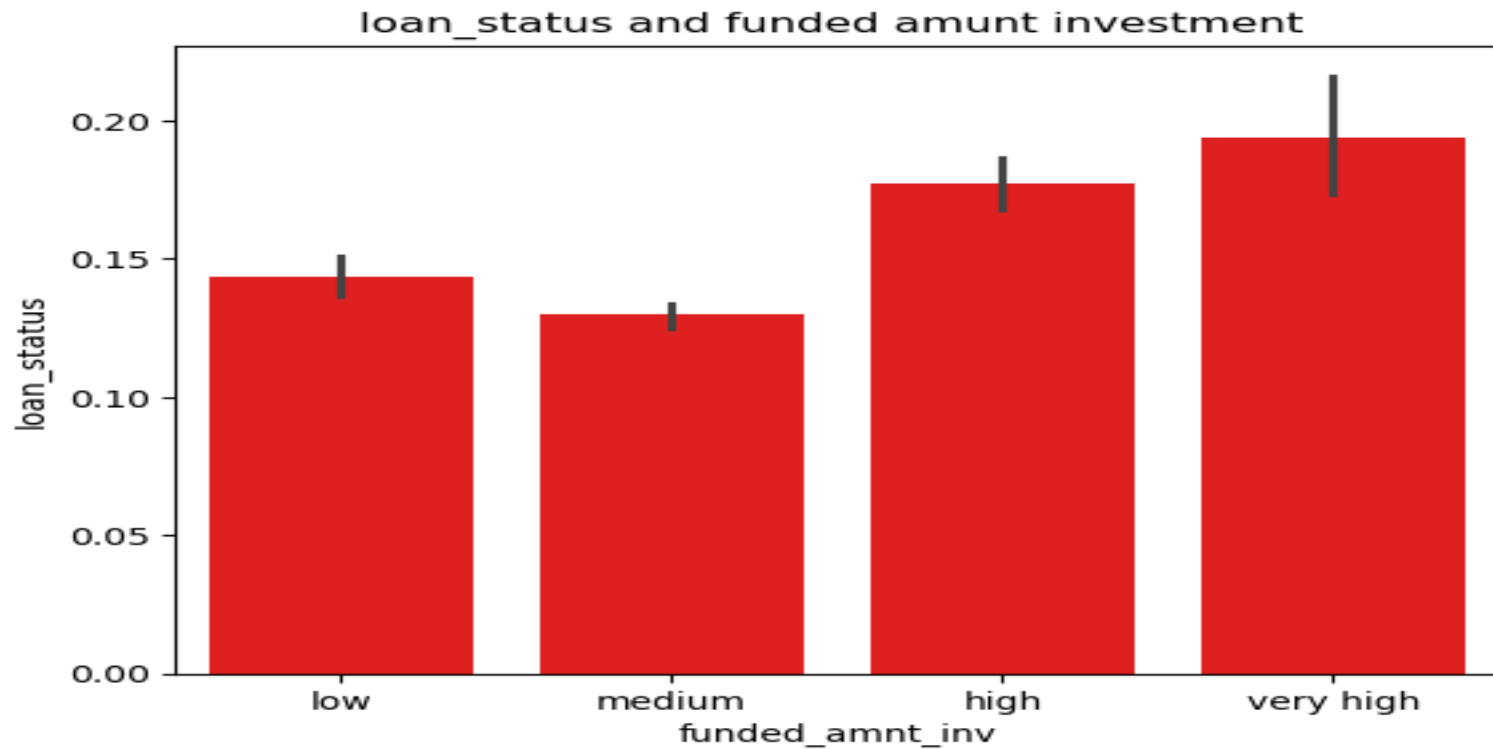And the visualization is for a better explanation.

Explain:
This graph show the comparison between count and loan_amnt in histogram.
And the visualization is for a better explanation.
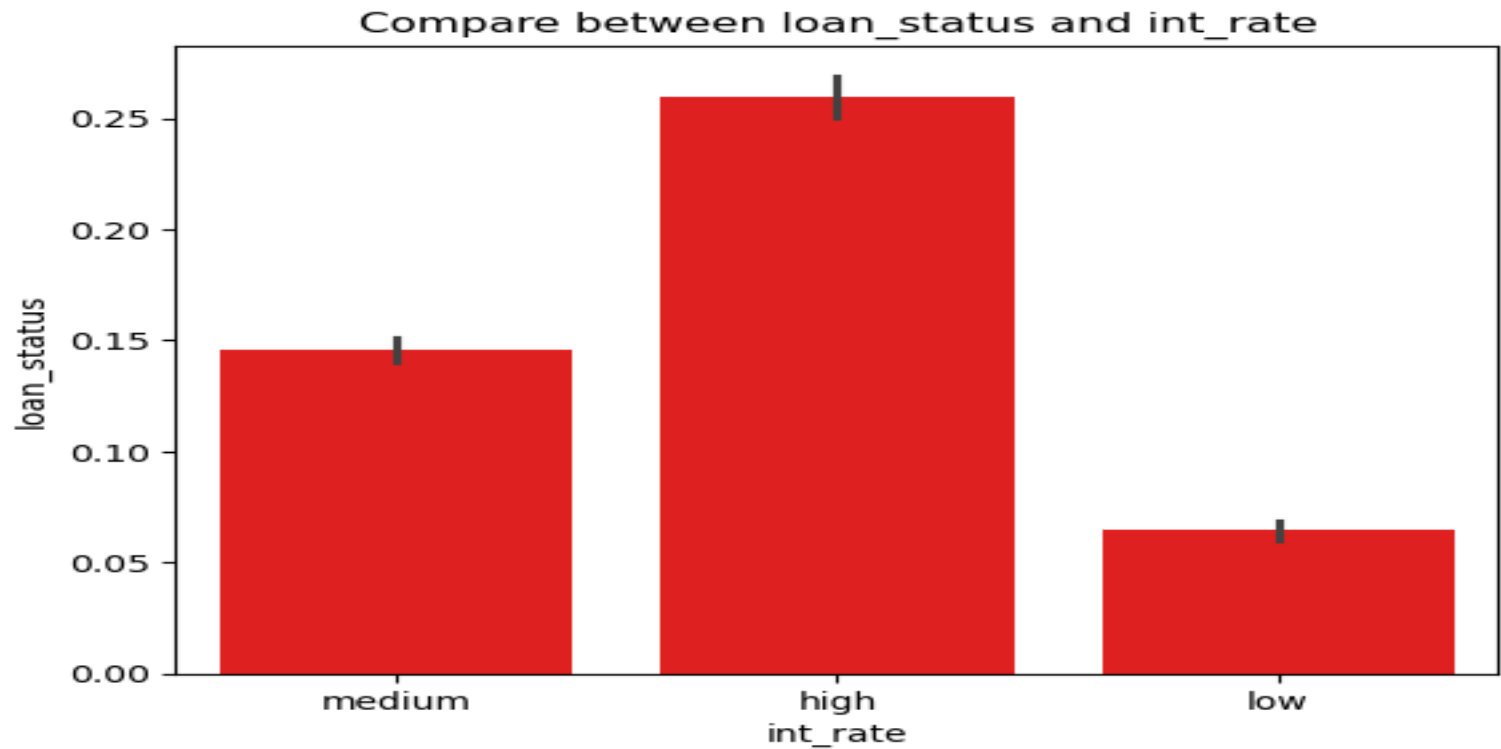
loan_status by medium,high,low,very high

Explain:
This graph show the comparison between loan_status and loan_amnt by me
Range , low , high and very high range , for a better understanding.
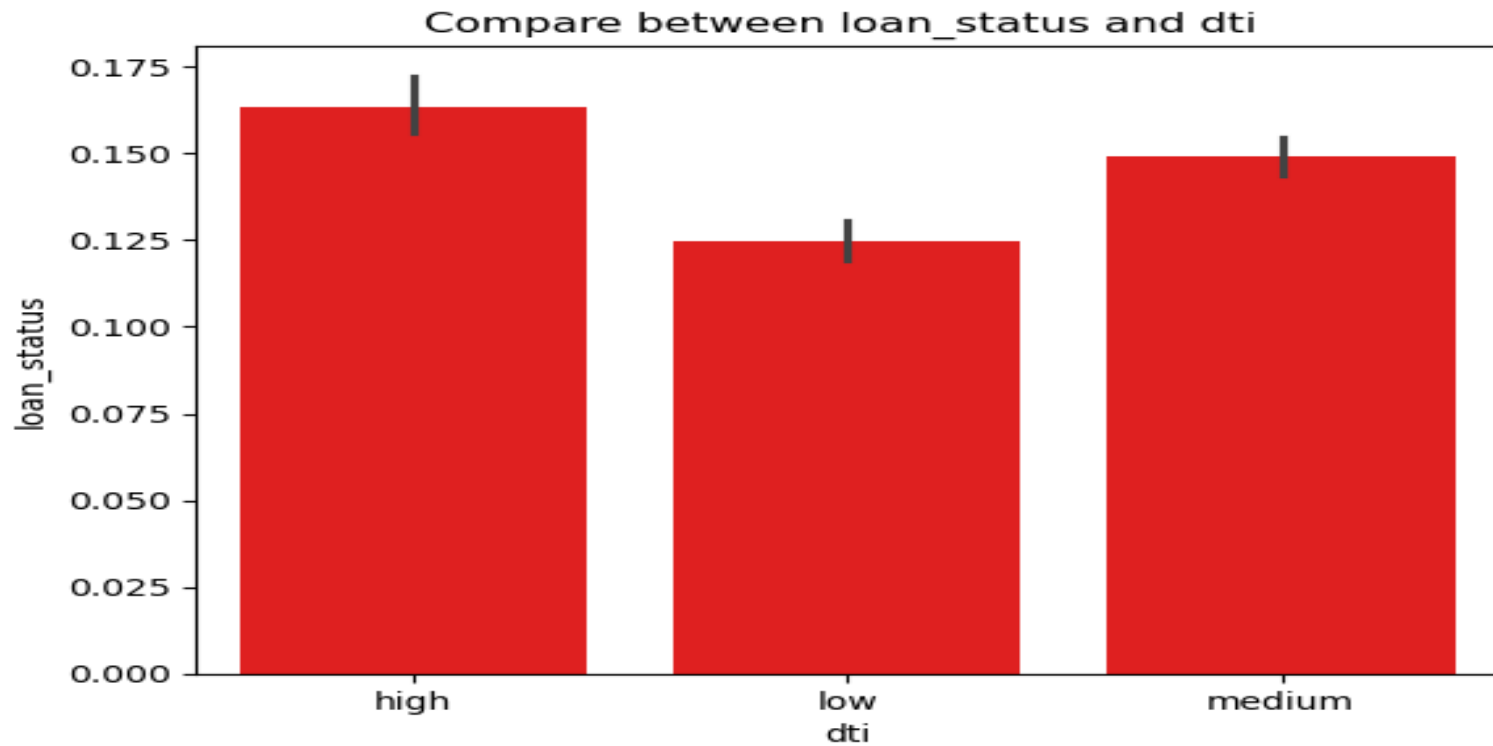And the visualization is for a better explanation

loan_status and funded amunt investment

Explain:
This graph show the comparison between loan_status and funded_amnt_inv.
And the visualization is for a better explanation.

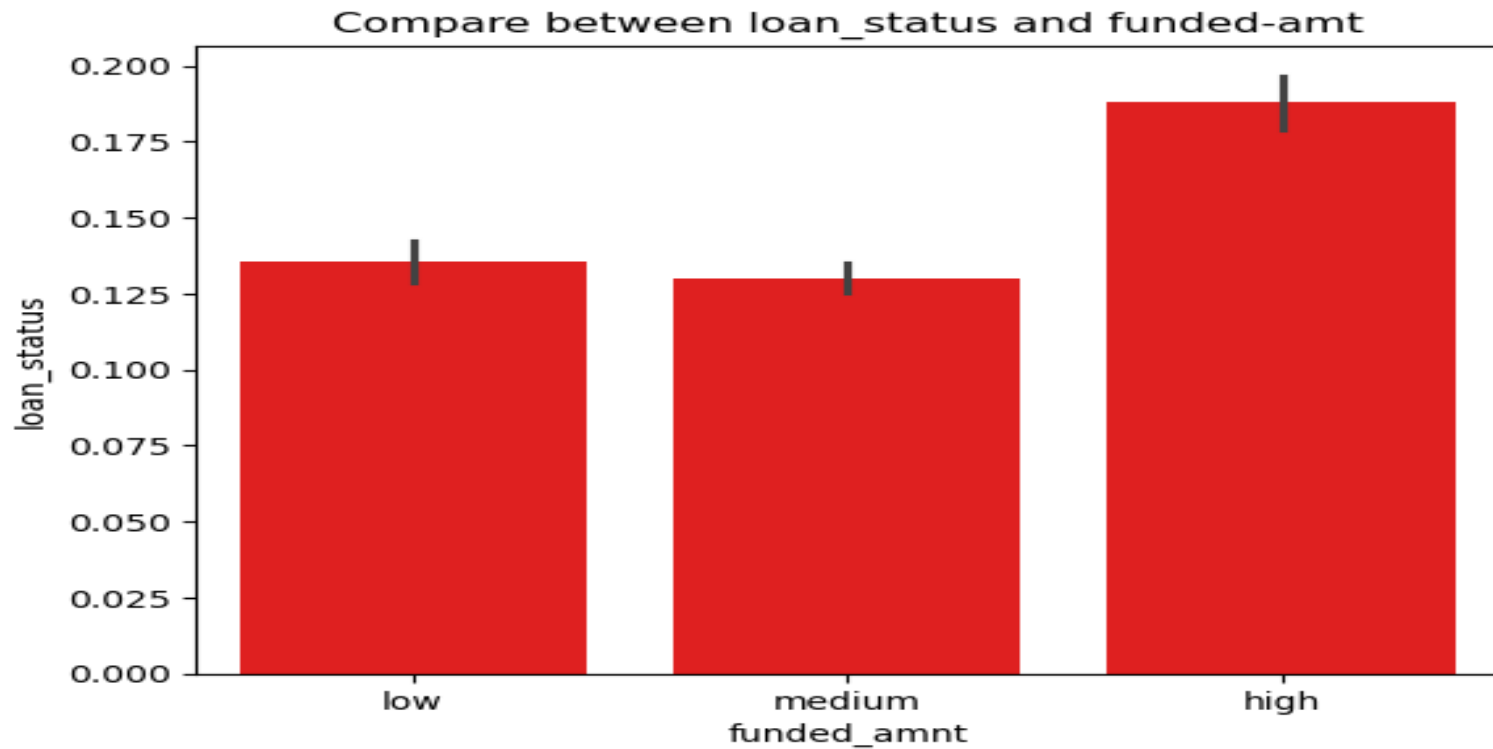Compare between loan_status and int_rate

Explain:
This graph show the comparison between loan_status and int_rate.
And the visualization is for a better explanation.

Compare between loan_status and dti
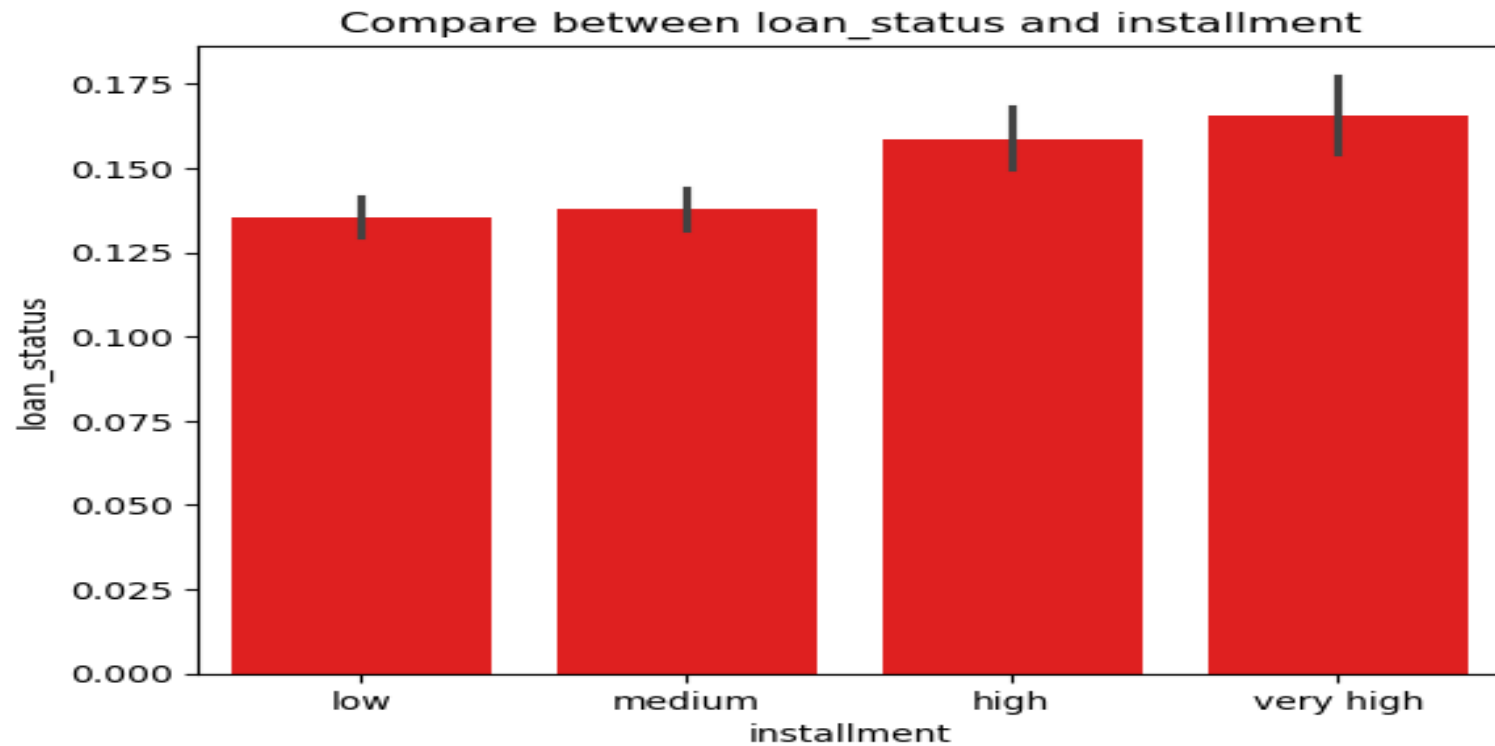
Explain:
This graph show the comparison between loan_status and dti.
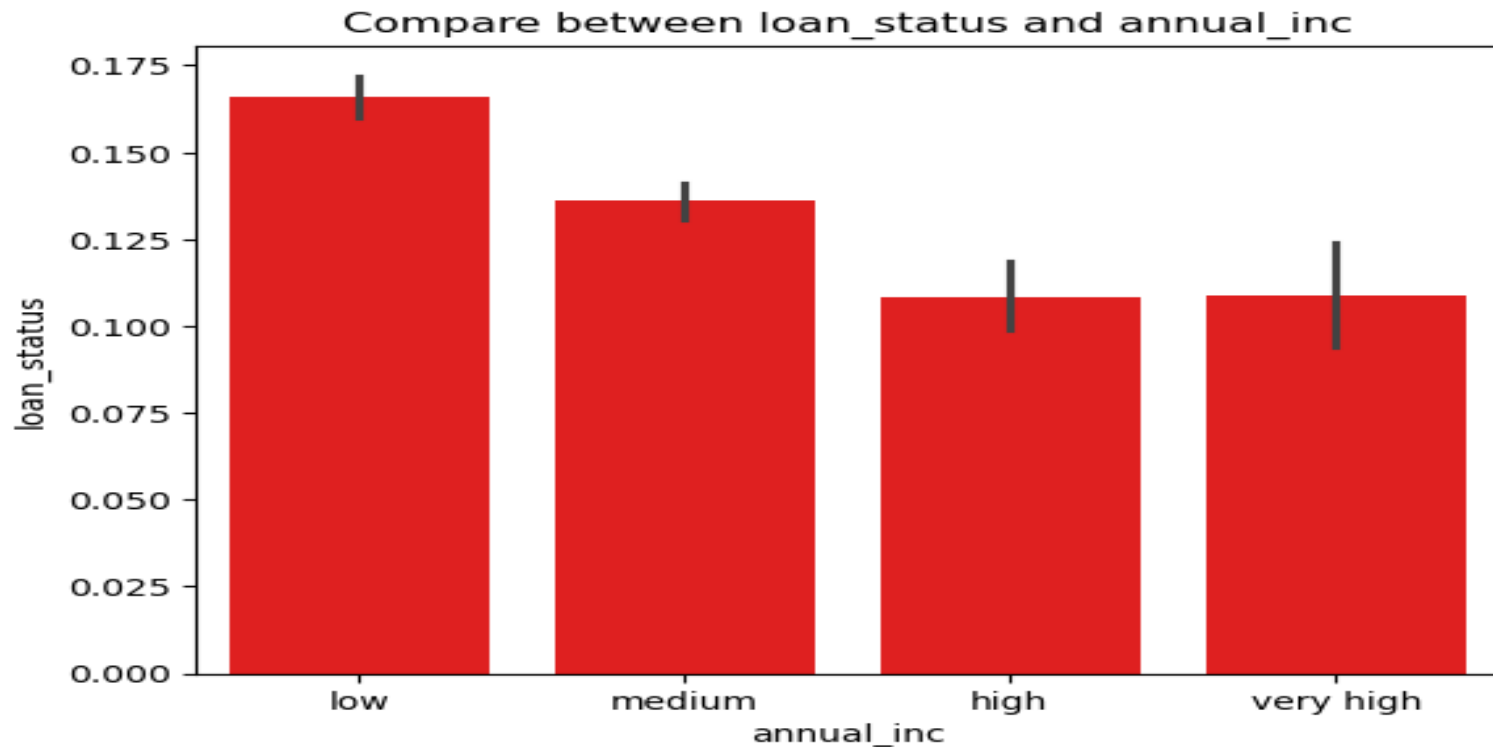And the visualization is for a better explanation

Compare between loan_status and funded-amt

Explain:
This graph show the comparison between loan_status and funded_amnt.
And the visualization is for a better explanation.

Compare between loan_status and installment

Explain:
This graph show the comparison between loan_status and installment
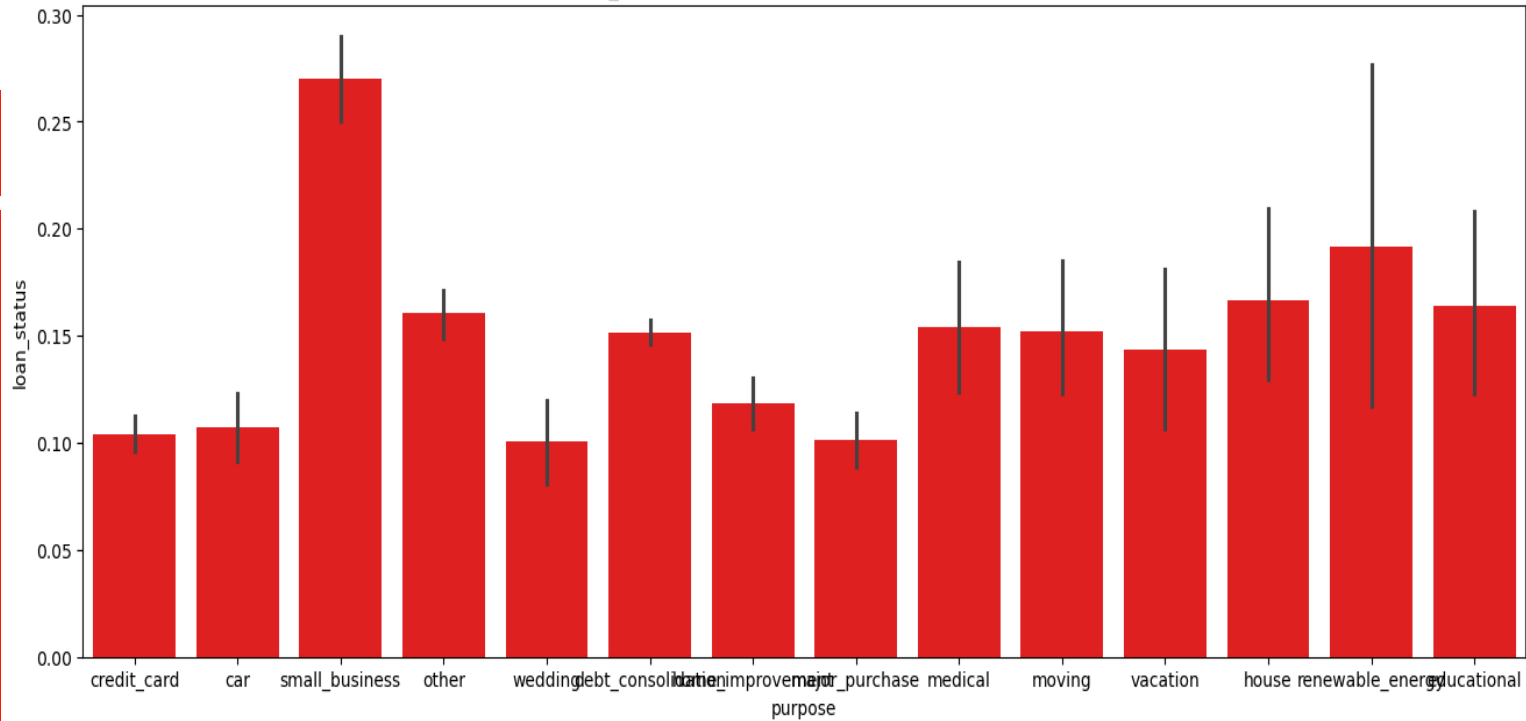And the visualization is for a better explanation

Compare between loan_status and annual_inc

Explain:
This graph show the comparison between loan_status and annual_inc,
And the visualization is for a better explanation.
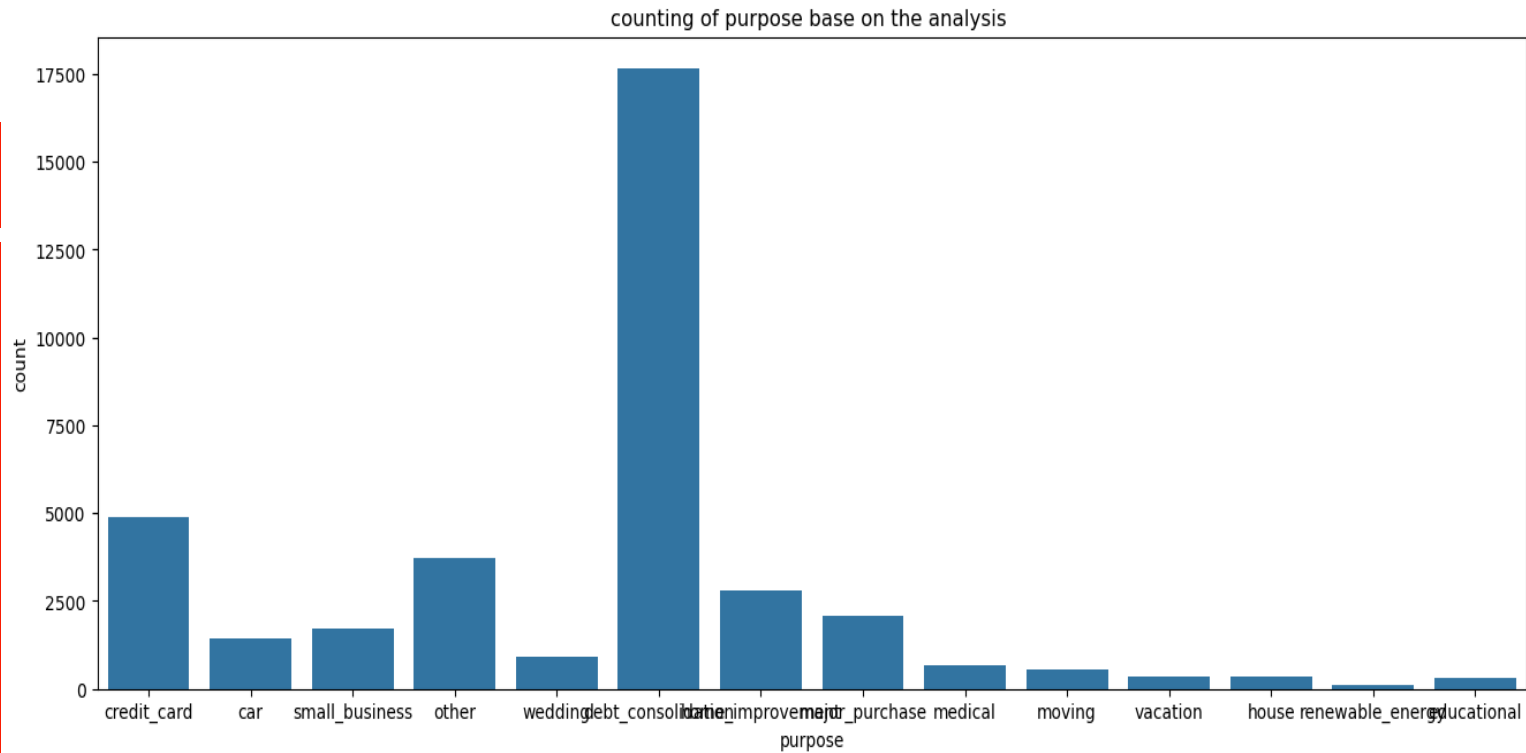
Compare between loan_status and emp_length

Explain:
This graph show the comparison between loan_status and emp_length
And the visualization is for a better explanation.

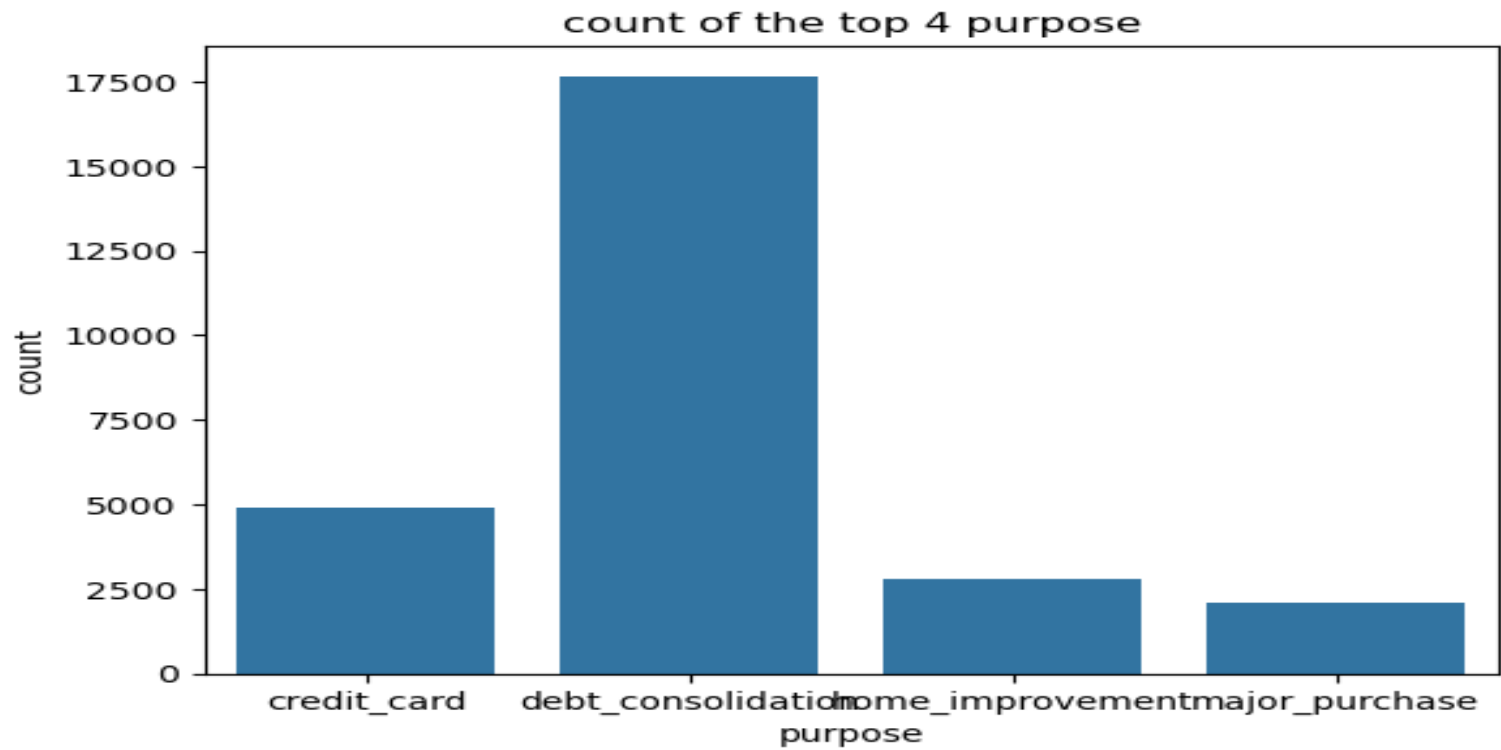Comapre loan_status and purpose in segmented univariate analysis

Explain:
This graph show the comparison between loan_status and purpose.
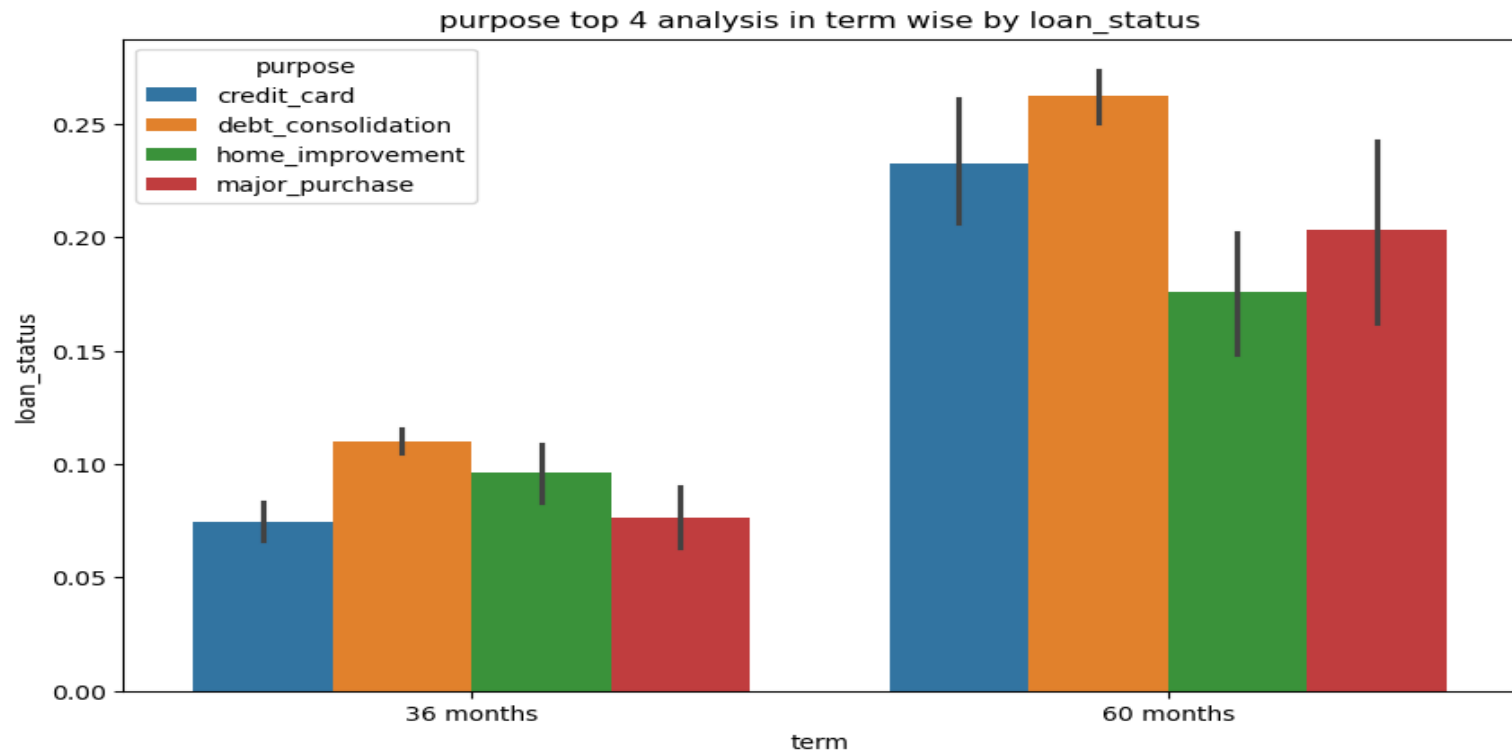And the visualization is for a better explanation.

counting of purpose base on the analysis

Explain:
This graph show the comparison between count and purpose to check the top

count of the top 4 purpose

Explain:
This graph show the comparison between count and purpose, we got top 4.
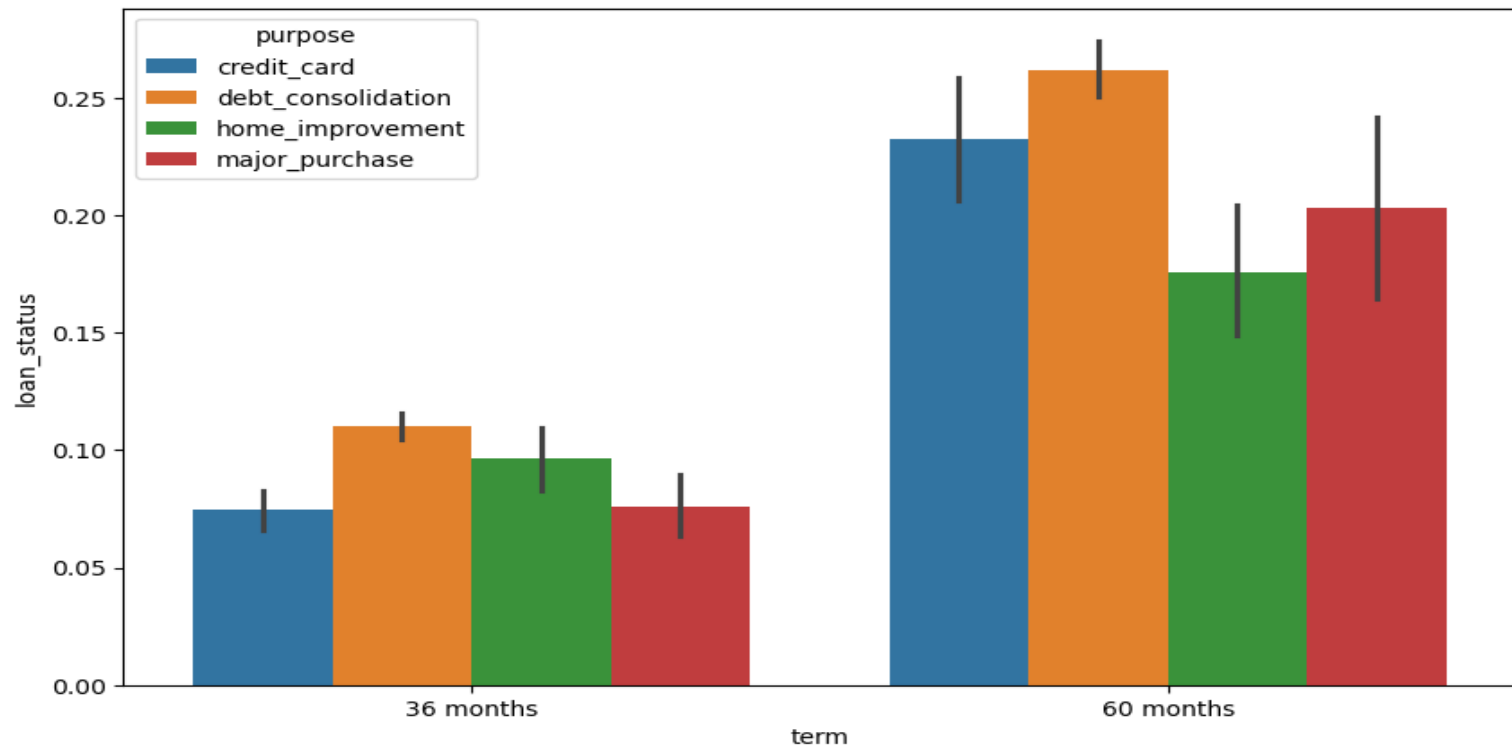
purpose top 4 analysis in term wise by loan_status
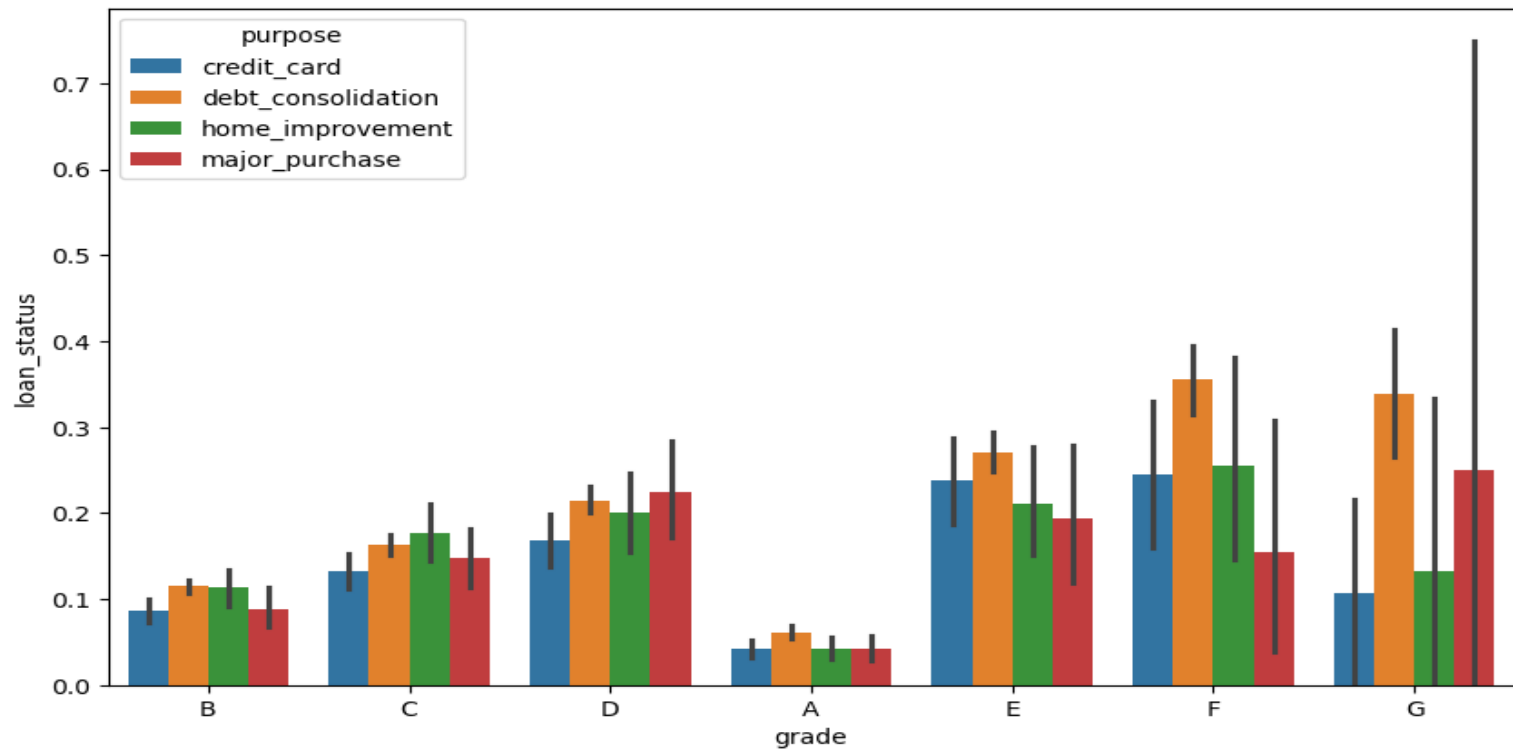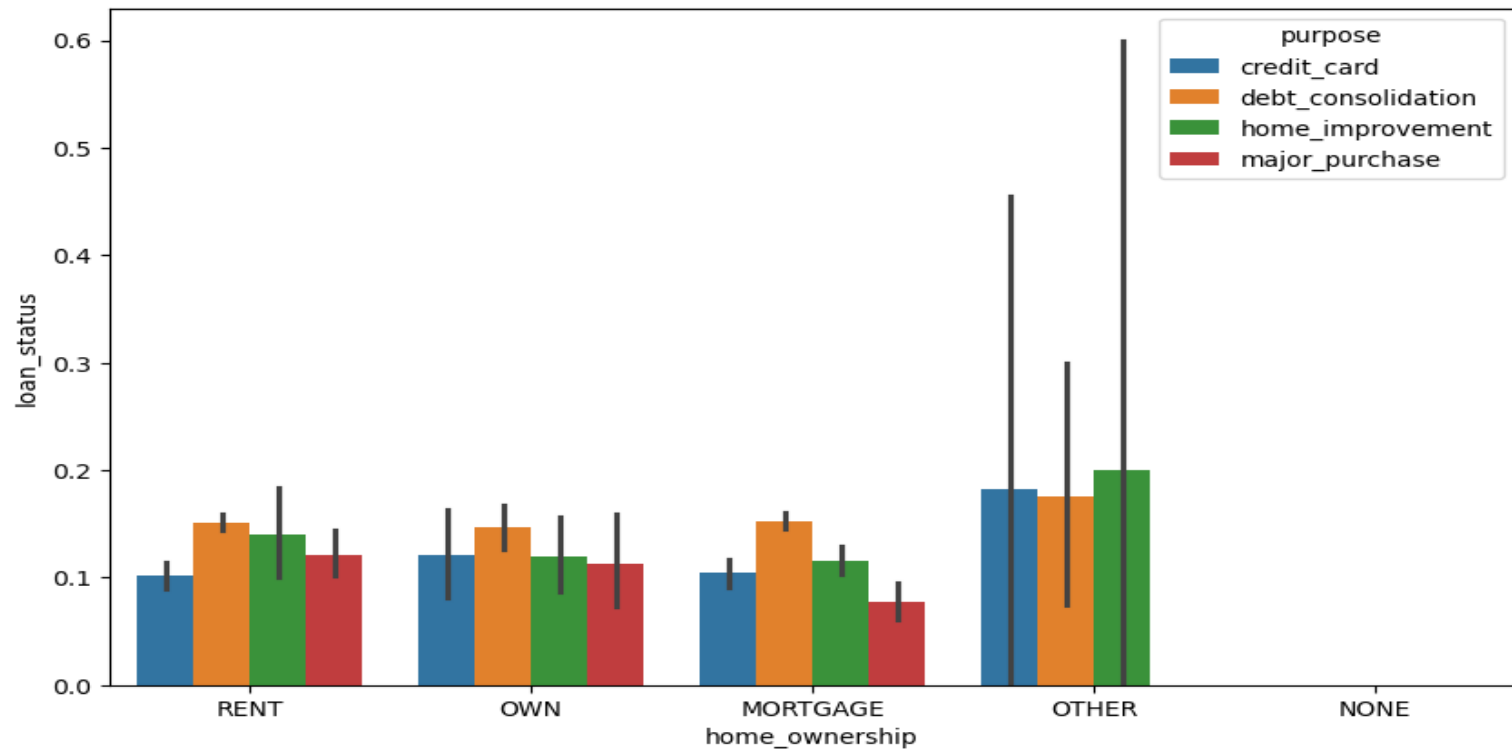
Explain:
We will now compare this top 4
This graph show the comparison between loan_status and term.

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and term.
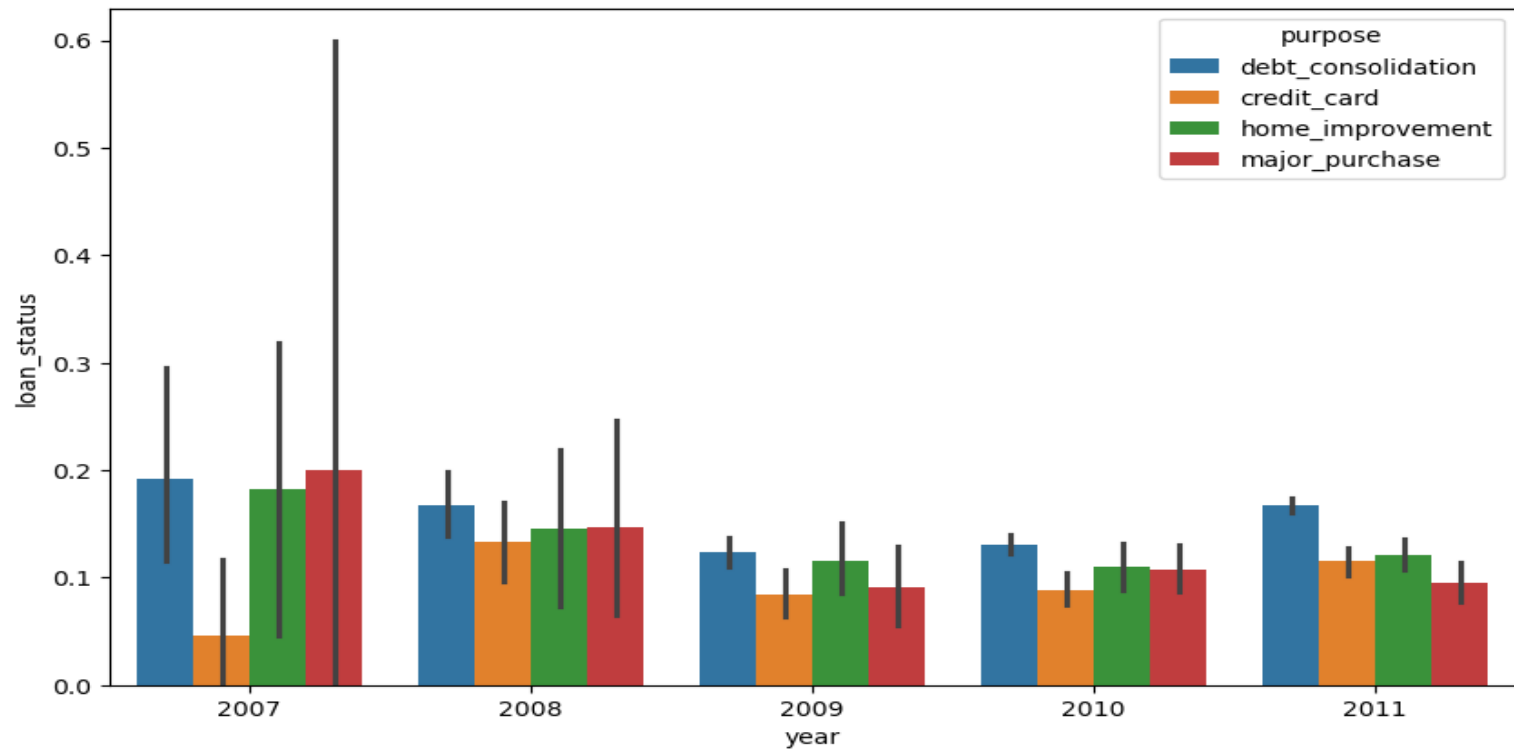
Explain:
We will now compare this top 4
This graph show the comparison between loan_status and grade.
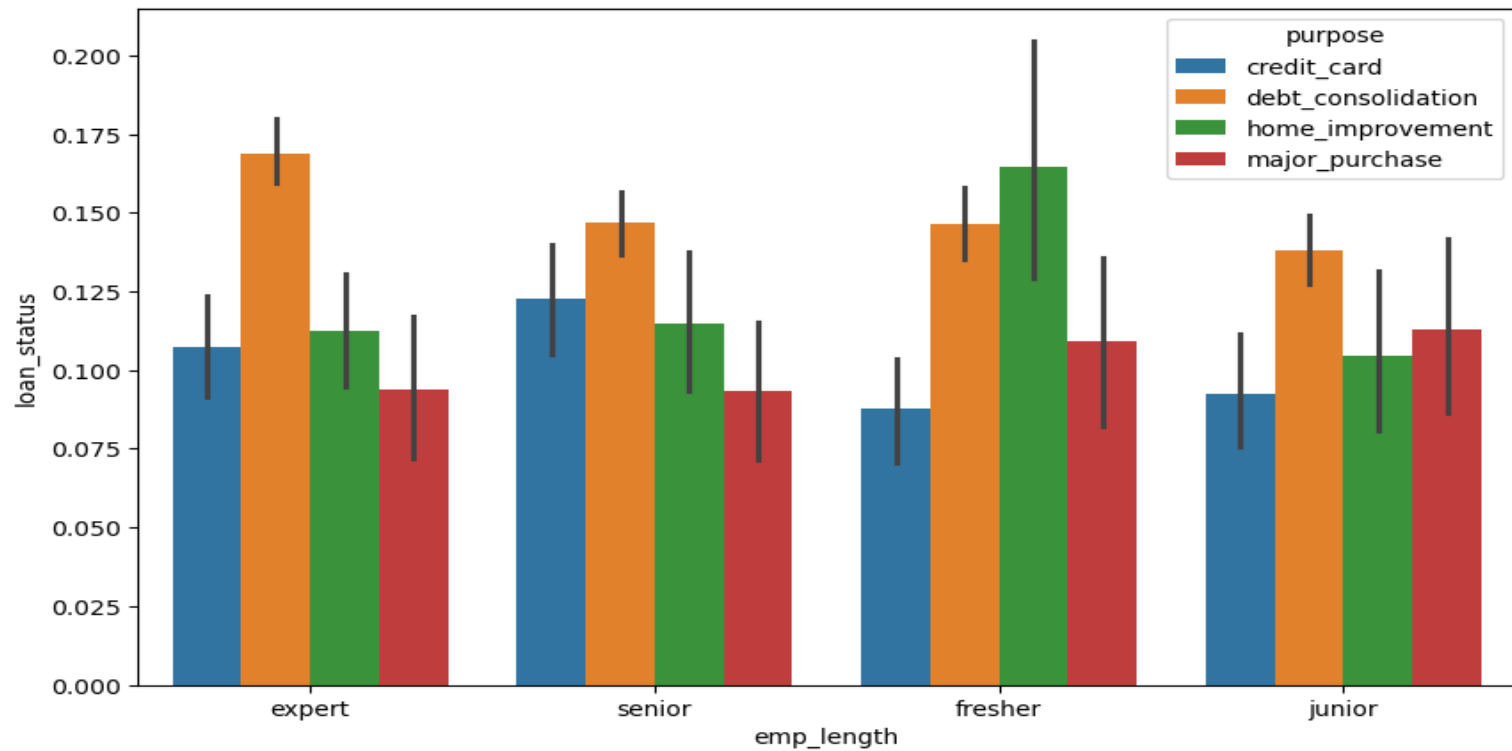
Explain:
We will now compare this top 4
This graph show the comparison between loan_status and home_ownership.
.

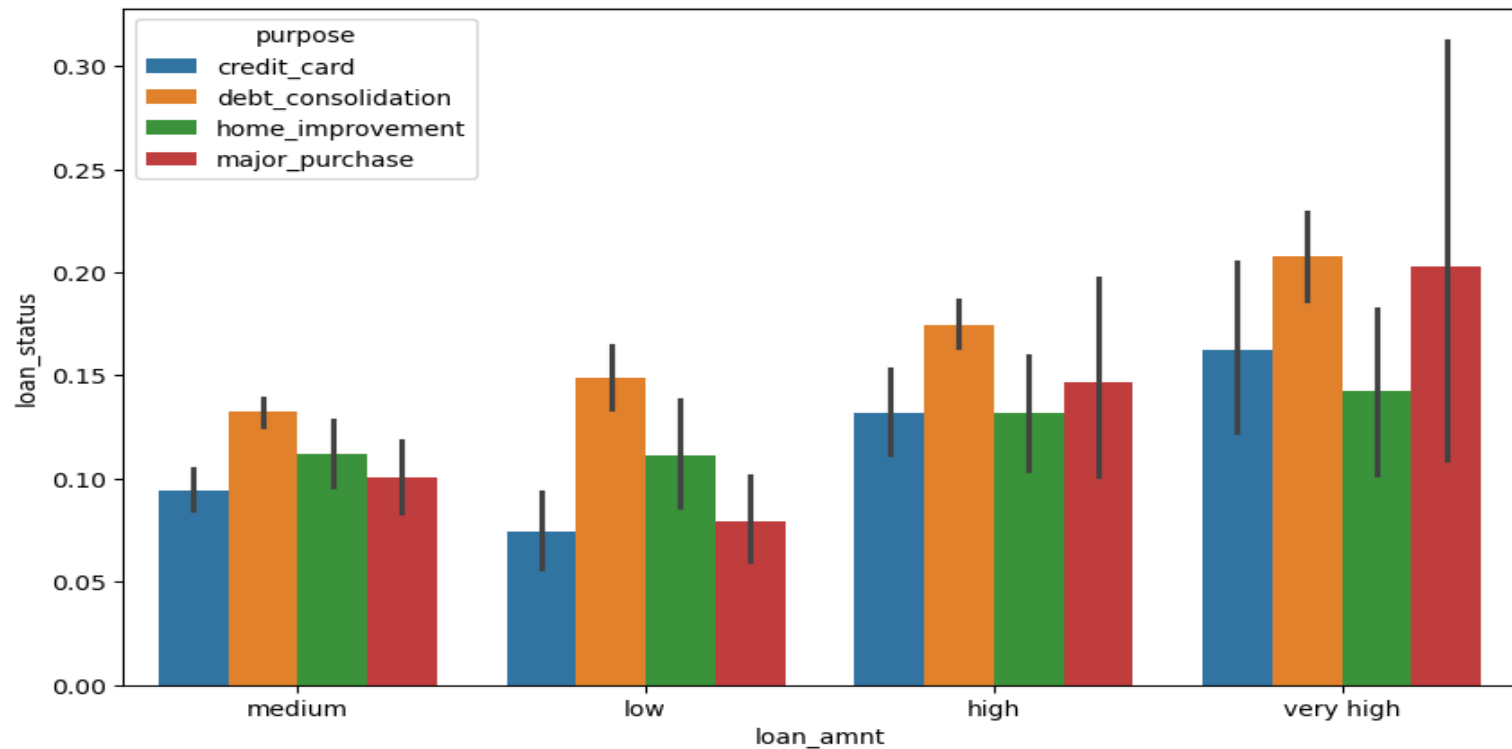Explain:
We will now compare this top 4
This graph show the comparison between loan_status and year.

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and emp_length

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and loan_amnt.

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and int_rate.

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and installment.

Explain:
We will now compare this top 4
This graph show the comparison between loan_status and dti.

Explain:
We will now compare this top 4
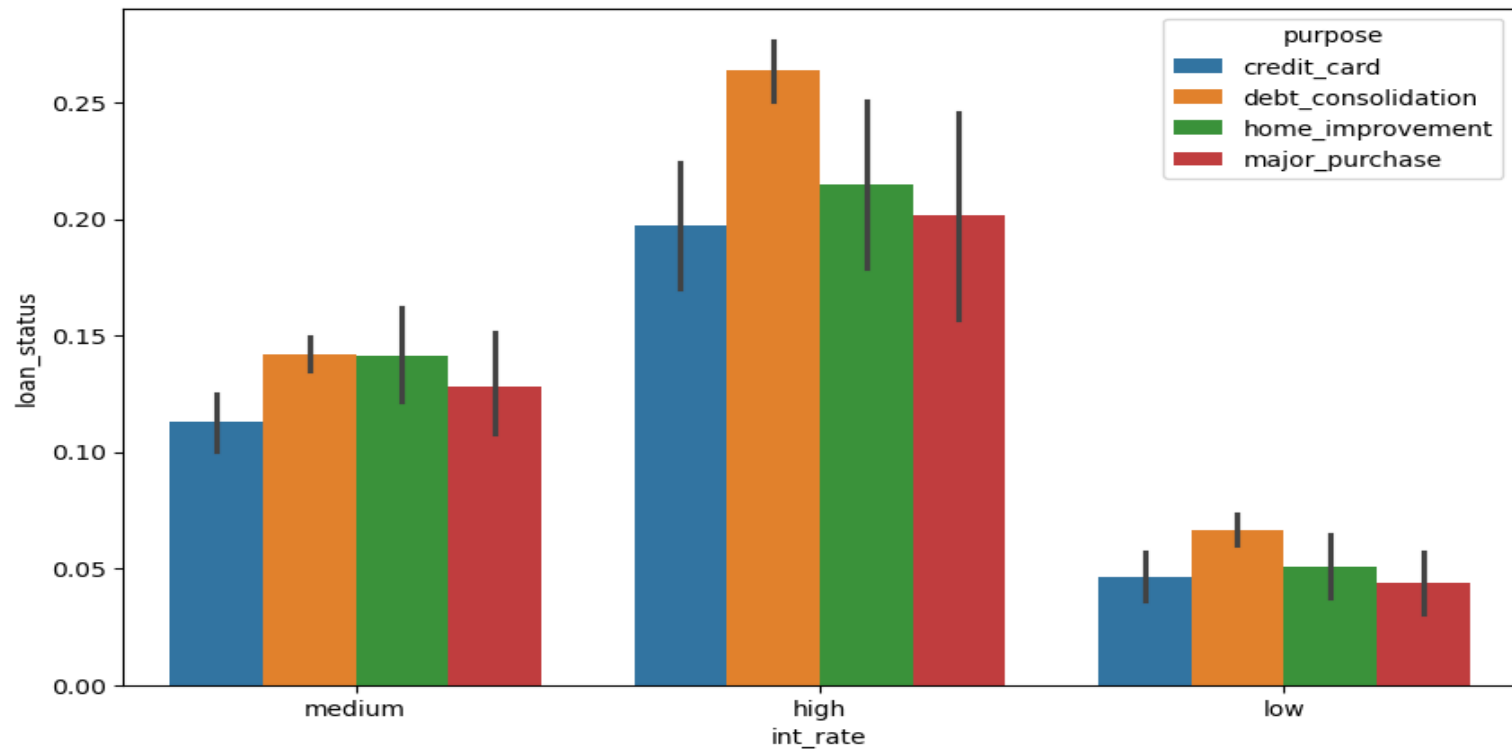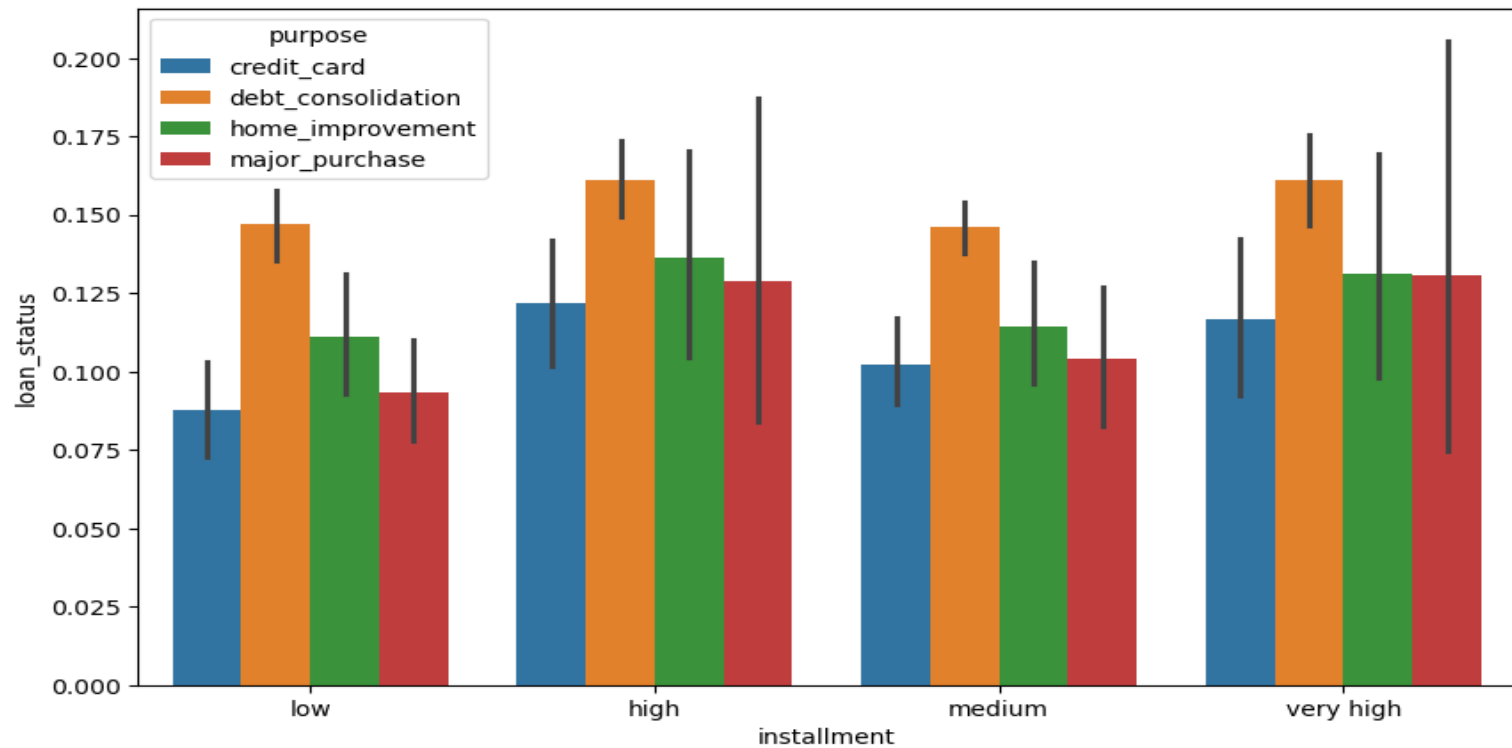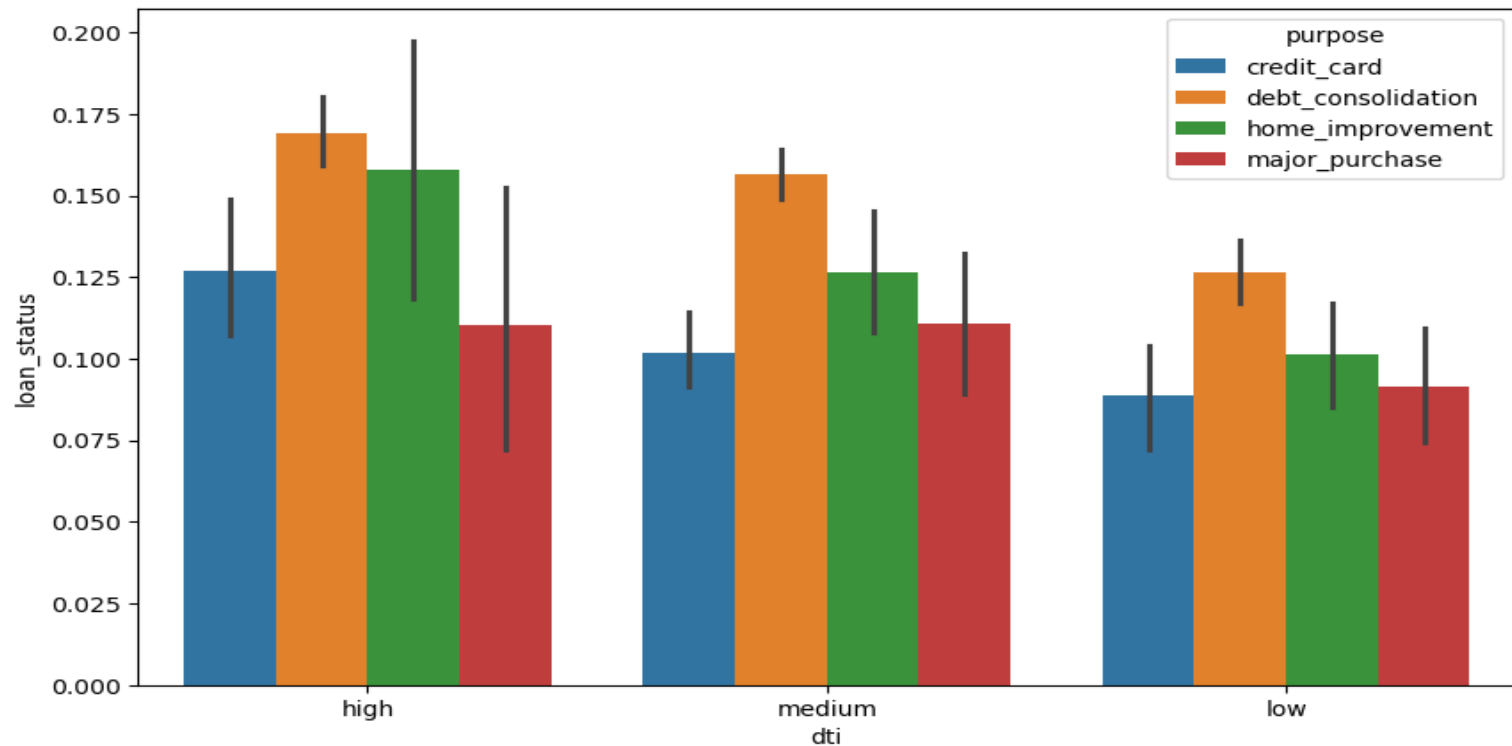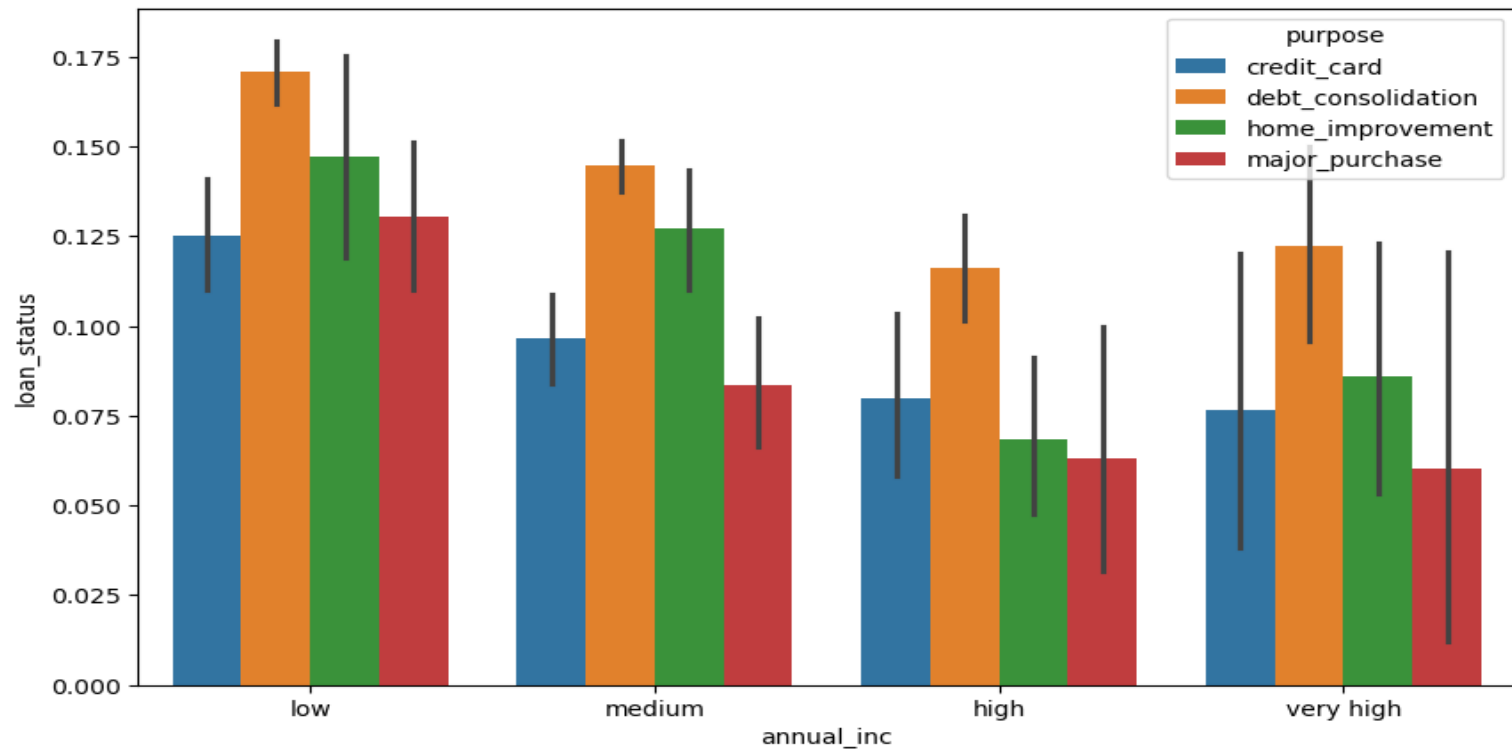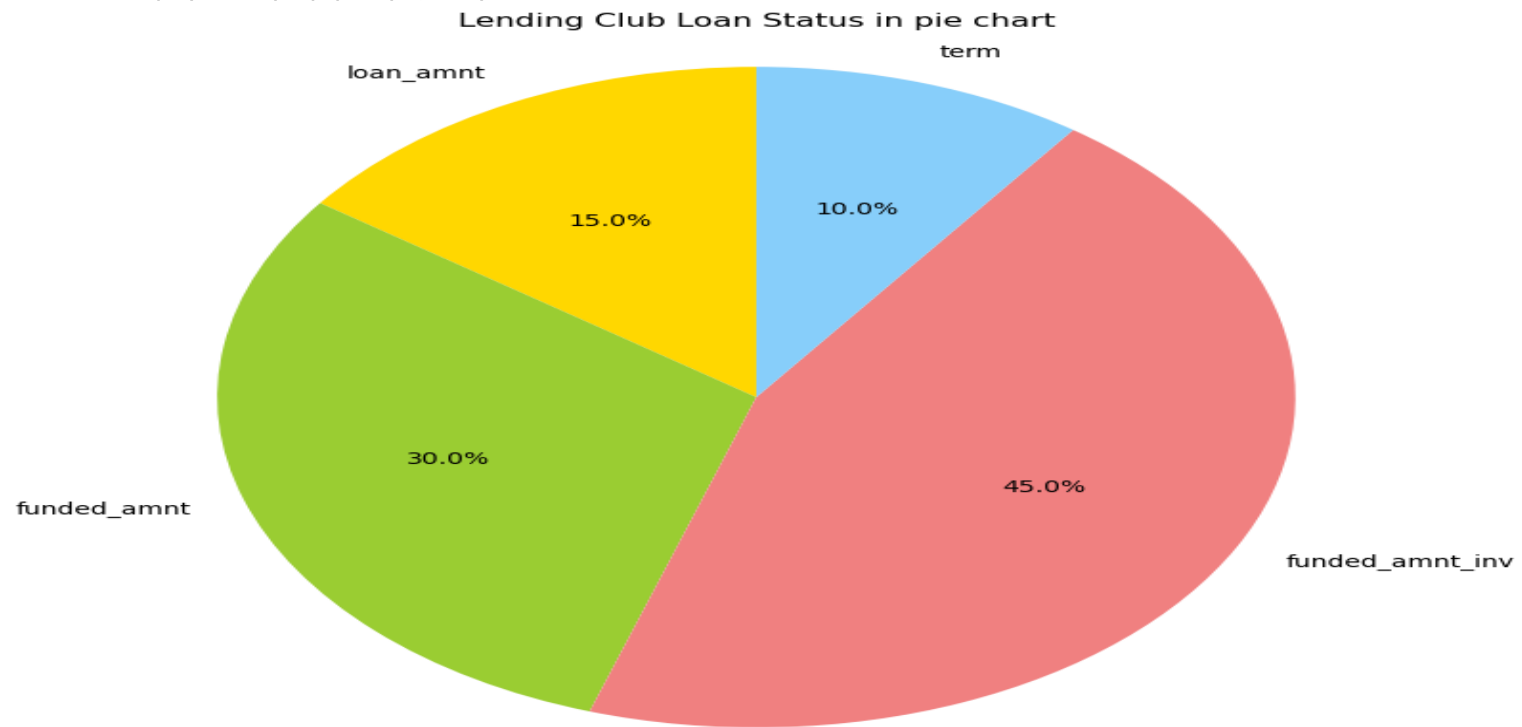This graph show the comparison between loan_status and annual_inc.

Lending Club Loan Status in pie chart

Explain:
It a pie chart for more basic understanding of the lending club.
This pie chart shows the comparison between loan_status ,term,funded_amnt
Funded_amnt_inv.

Comparison of loan_amt and funded_amt

loan_amnt

33.3%

66.7%

funded_amnt

Explain:
It a pie chart for more basic understanding of the lending club.
This pie chart shows the comparison between loan_status and funded_amnt

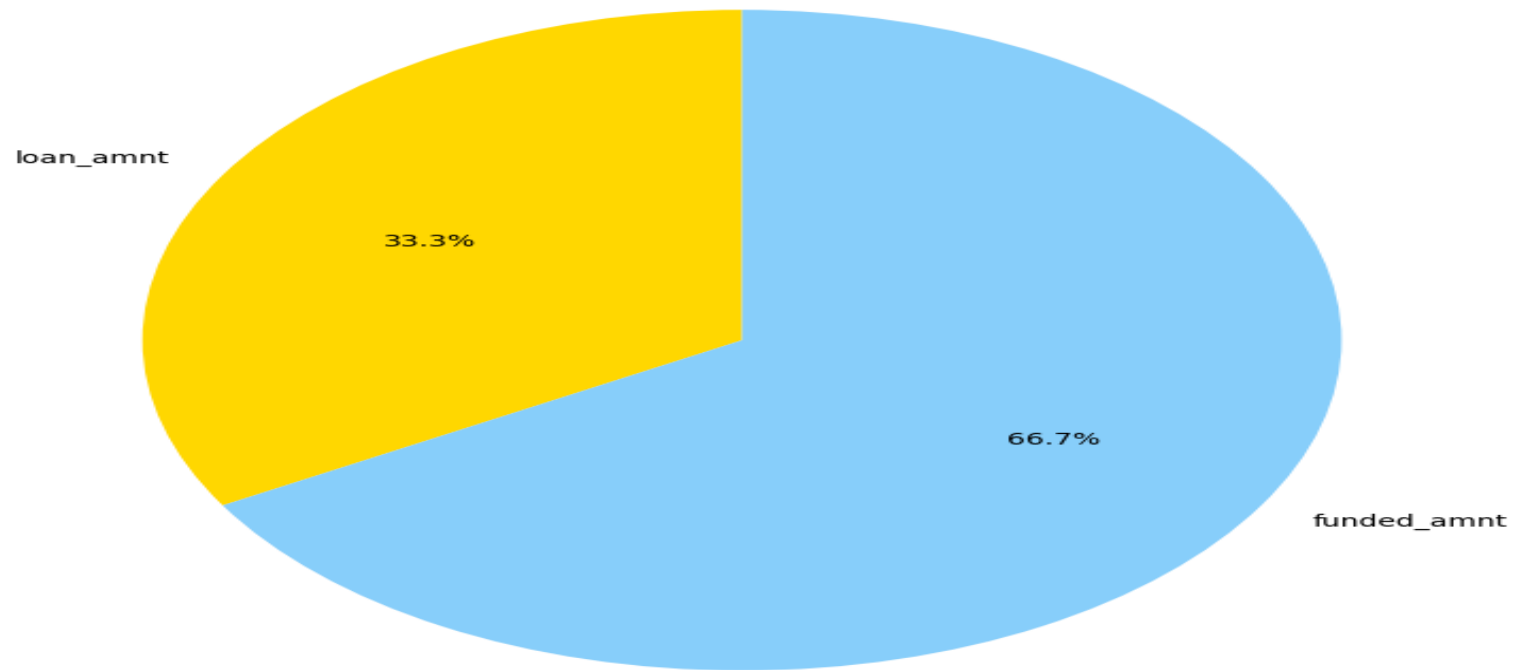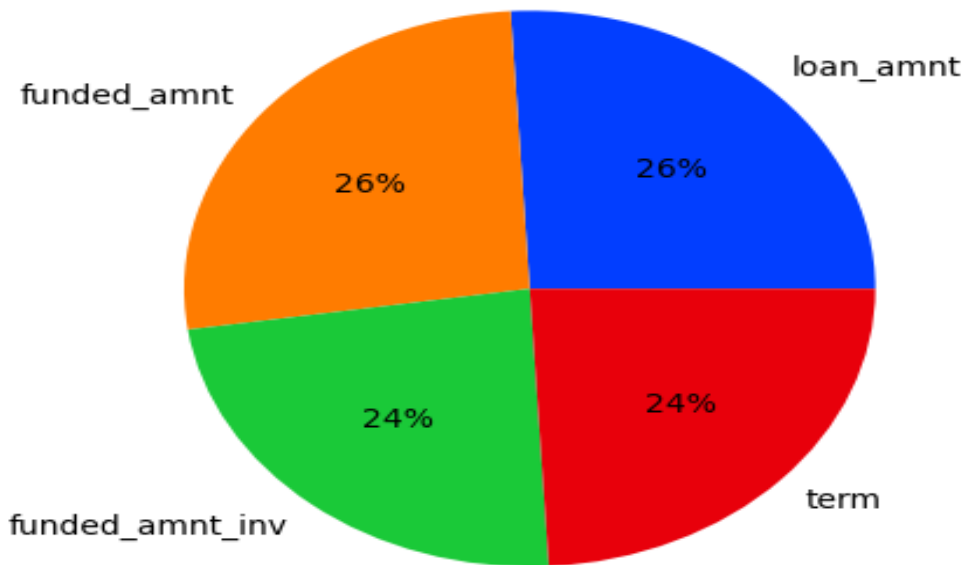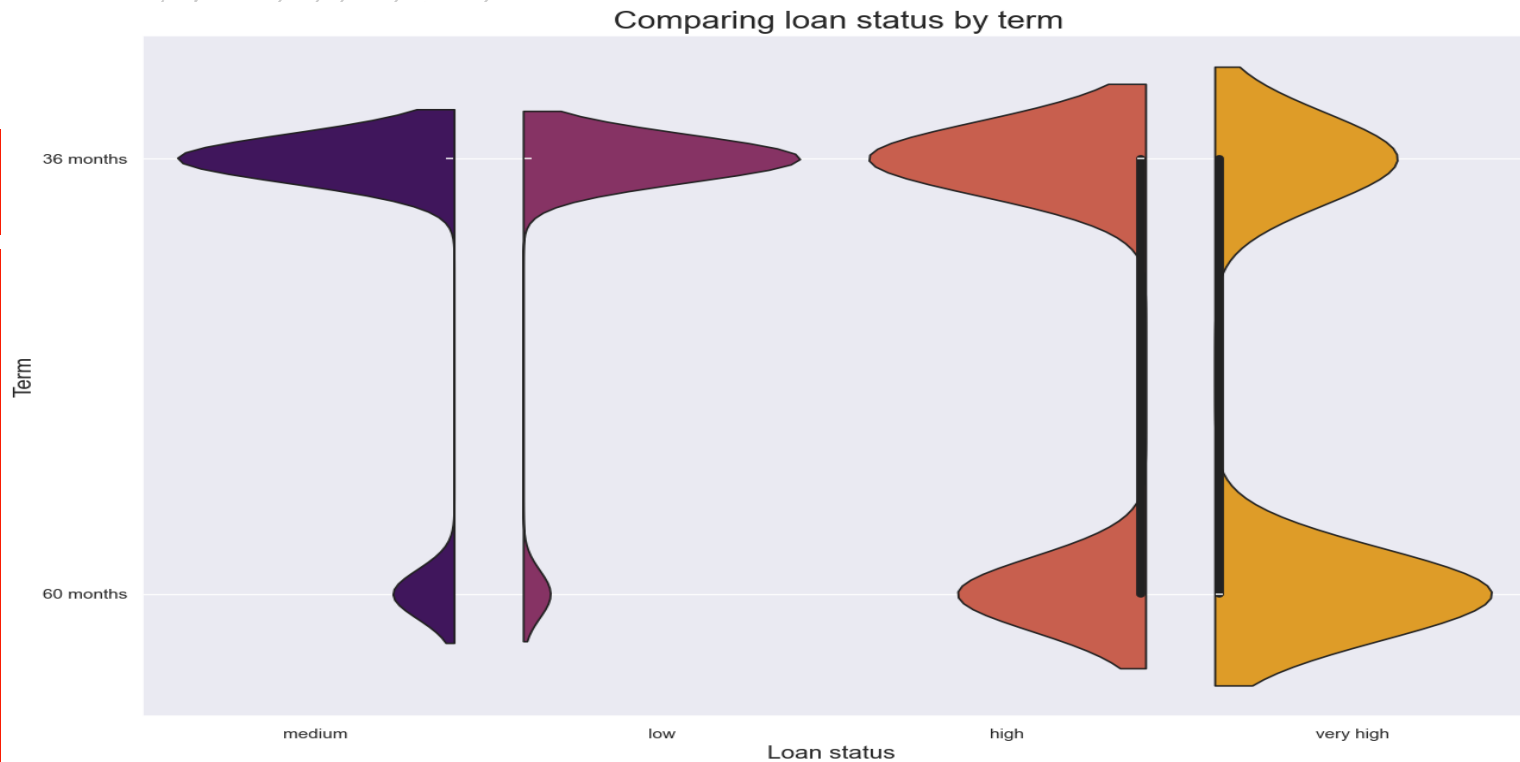# Comparision between loan_amt and funded_amt,funded_amt_invt and term

Explain:
It a pie chart for more basic understanding of the lending club.
This pie chart shows the comparison between loan_status ,term,funded_amnt
Funded_amnt_inv.
Better visualization in pie chart.

Comparing loan status by term

Explain:
It a violin plot for more basic understanding of the lending club.
This pie chart shows the comparison between loan_status and term

Conclusion

- This is the lending club loan project (default) .

- This project is base on the bank that gave us loan.

- In this project we just to analysis the situation around the bank of the loan.

- One is the borrower and the other one is the investors.

- We have analysis the loan_status very deptly in this project of the lending club .

- All the graph we have explain in this project we have made after :
- i. Data Understanding
- ii. Data Cleaning
- iii. Data Analysis
- iv. Recommendation

- 7. Rest the explanation is given in this ppt , thankyou..