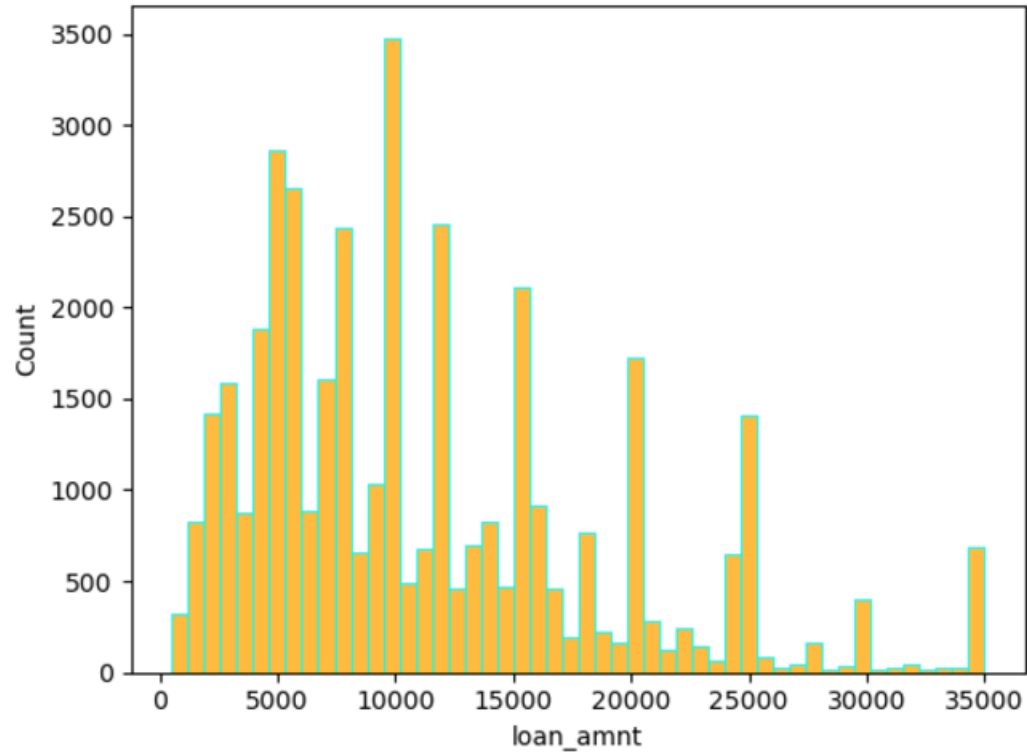


# Histplot for loan amount : Maximum loan amount is 10000



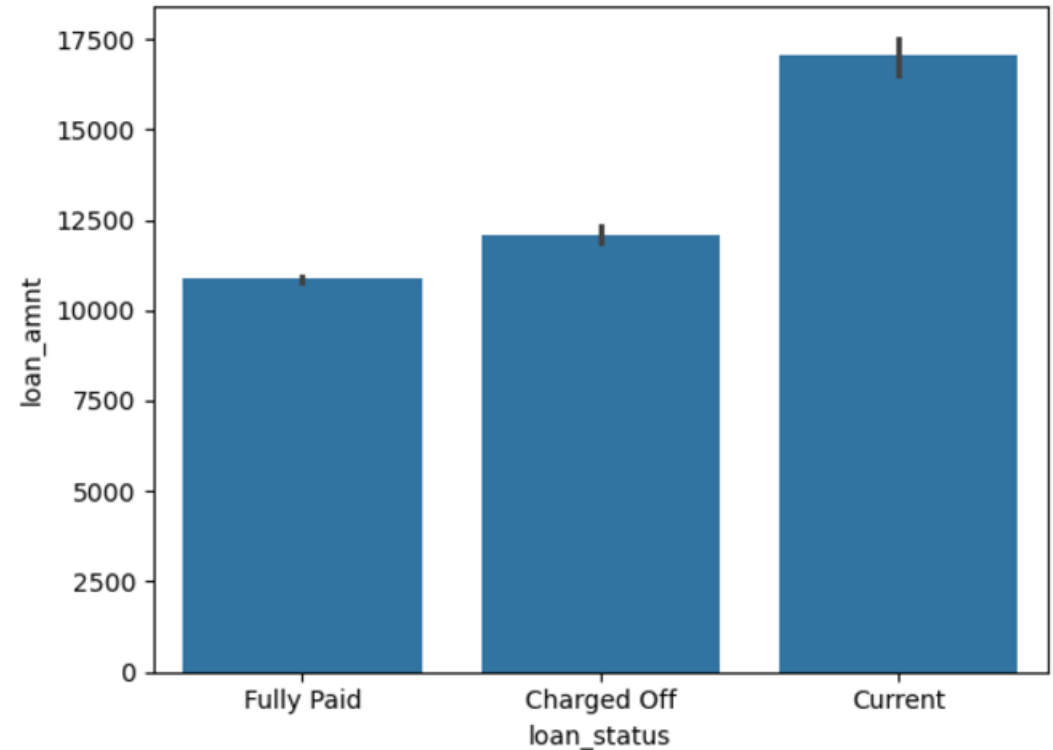
# Bi Variate Analysis: loan status and loan amount

Applicants with current status have huge loan amount around 16500

Applicants with charged off status have loan amount around 10000

Applicants with fully paid status have taken less loan

```
[1/1]: <Axes: xlabel= loan_status , ylabel= loan_amnt >
```



# Bi variate analysis for loan\_status and annual income

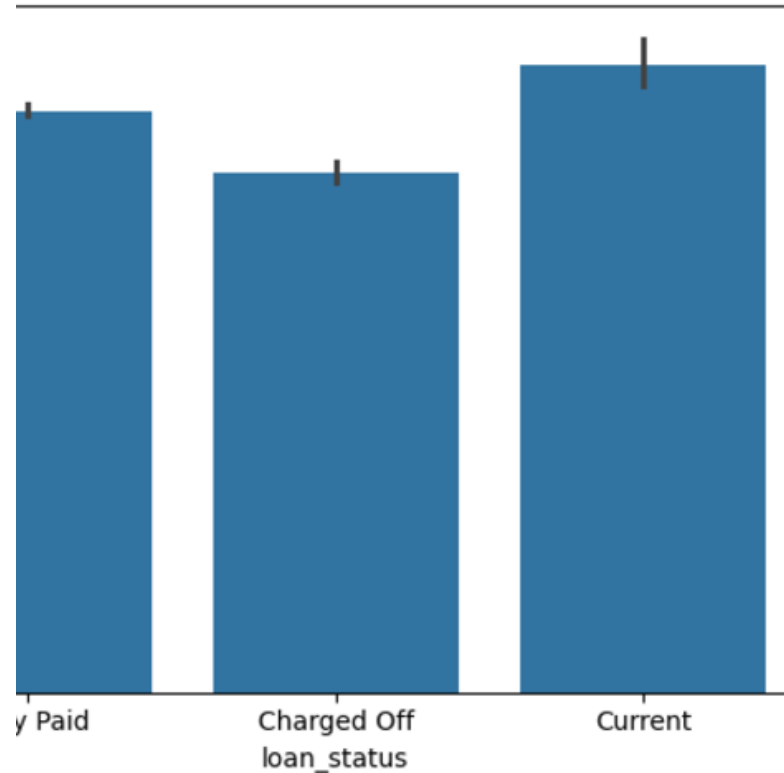
Applicants with current status have high annual income around 75000

Applicants with charged off status have 60000 annual income

Fully paid applicants have 70000 annual income

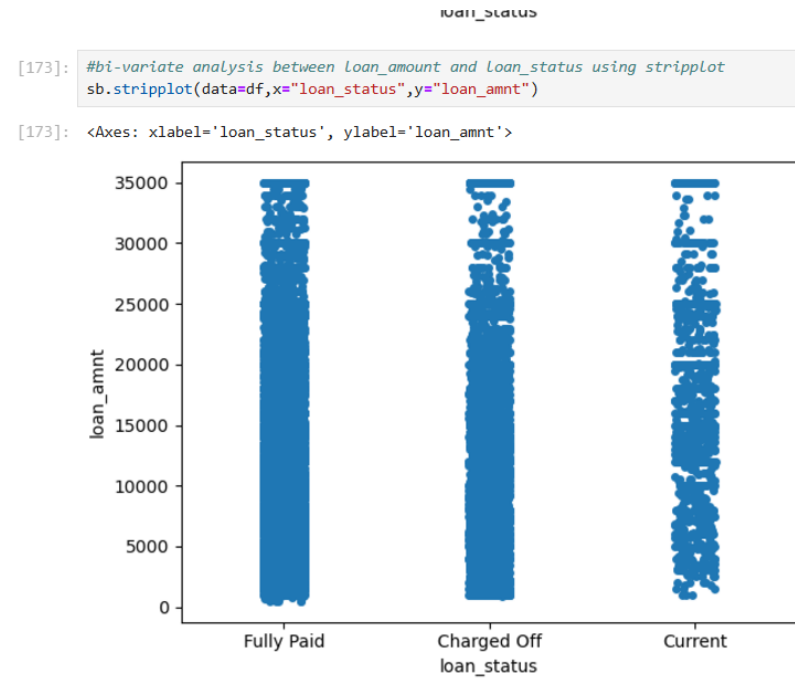
```
using loan_status and annual_inc: current applicants have high annual income  
'loan_status', y='annual_inc')
```

```
tatus', ylabel='annual_inc'>
```



# Stripplot: loan\_status and loan\_amnt

Every status is equally distributed corresponding to loan amount



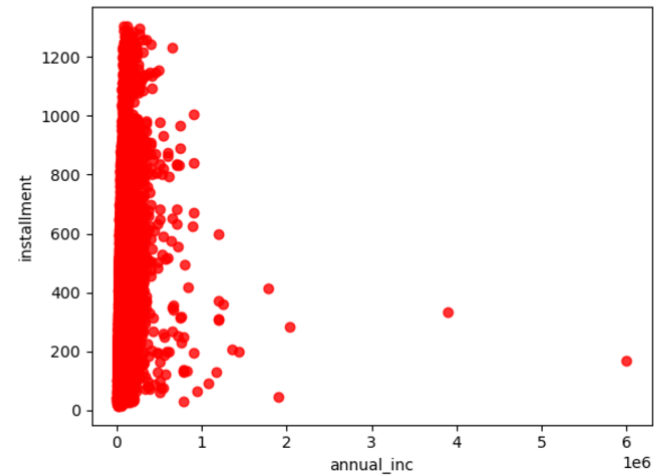
# Bi-variate analysis using Regplot: annual\_inc and installment

Majority of the applicants with low annual income have chose installments

## Bi-Variate using regplot

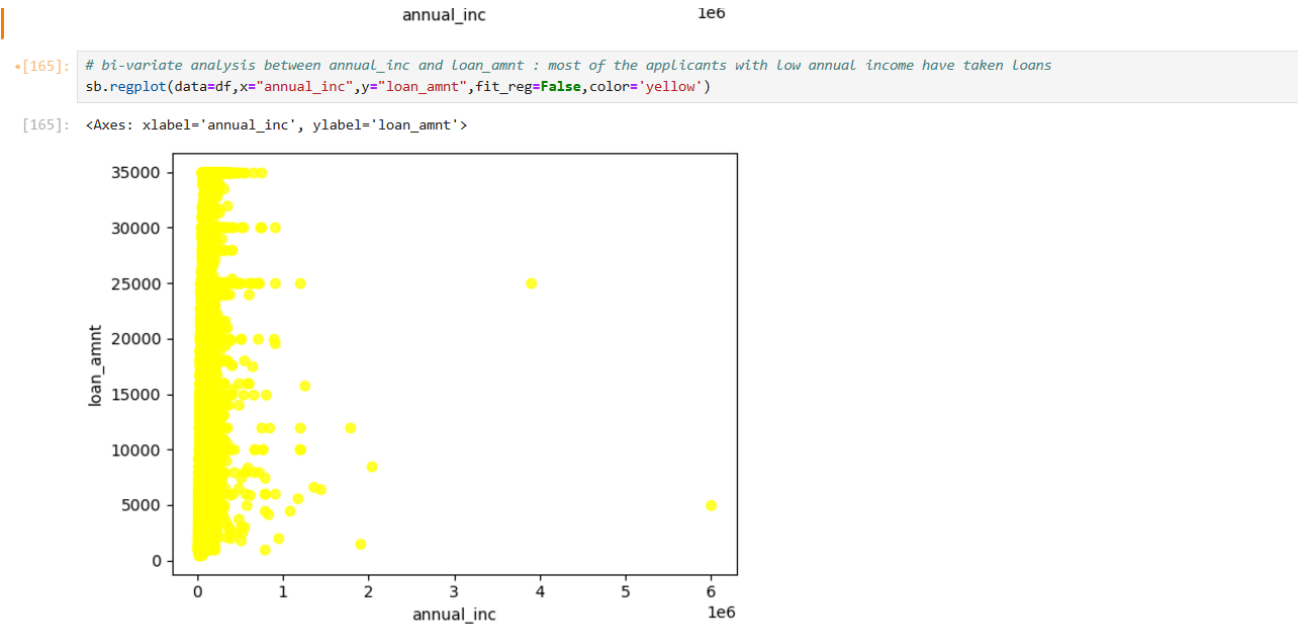
```
[291]: #bi-variate analysis between loan amount and installment: applicants having low annual income opted for many installments  
sb.regplot(data=df,x="annual_inc",y="installment",fit_reg=False,color='red')
```

```
[291]: <Axes: xlabel='annual_inc', ylabel='installment'>
```



# Bi-variate analysis using Regplot: annual\_inc and loan\_amnt

Many of the applicants with low annual income have opted for loans



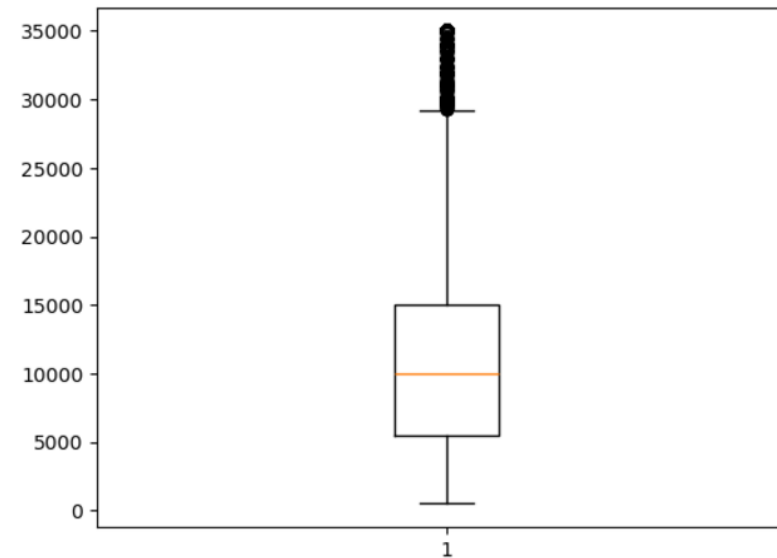
# Univariate: box plot

Majority of the loan amounts are between 30000 and 35000

## Univariate

```
•[167]: #univariate analysis for loan_amnt using box-plot  
plt.boxplot(df["loan_amnt"])
```

```
[167]: {'whiskers': [<matplotlib.lines.Line2D at 0x1ed7e784e60>,  
                  <matplotlib.lines.Line2D at 0x1ed0e6d6180>],  
        'caps': [<matplotlib.lines.Line2D at 0x1ed0e6d6480>,  
                 <matplotlib.lines.Line2D at 0x1ed0e6d6750>],  
        'boxes': [<matplotlib.lines.Line2D at 0x1ed029b6450>],  
        'medians': [<matplotlib.lines.Line2D at 0x1ed0e6d68a0>],  
        'fliers': [<matplotlib.lines.Line2D at 0x1ed0e6d6ba0>],  
        'means': []}
```



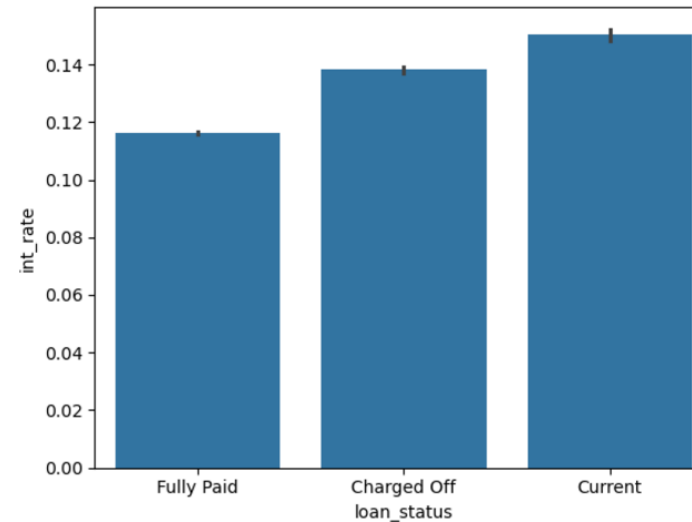
# Bi-Variate Analysis: Loan Status and Interest Rate

Applicants with current status have huge interest rate

Applicants with charged off status have around 0.13 interest rate

Fully paid applicants have less interest rate

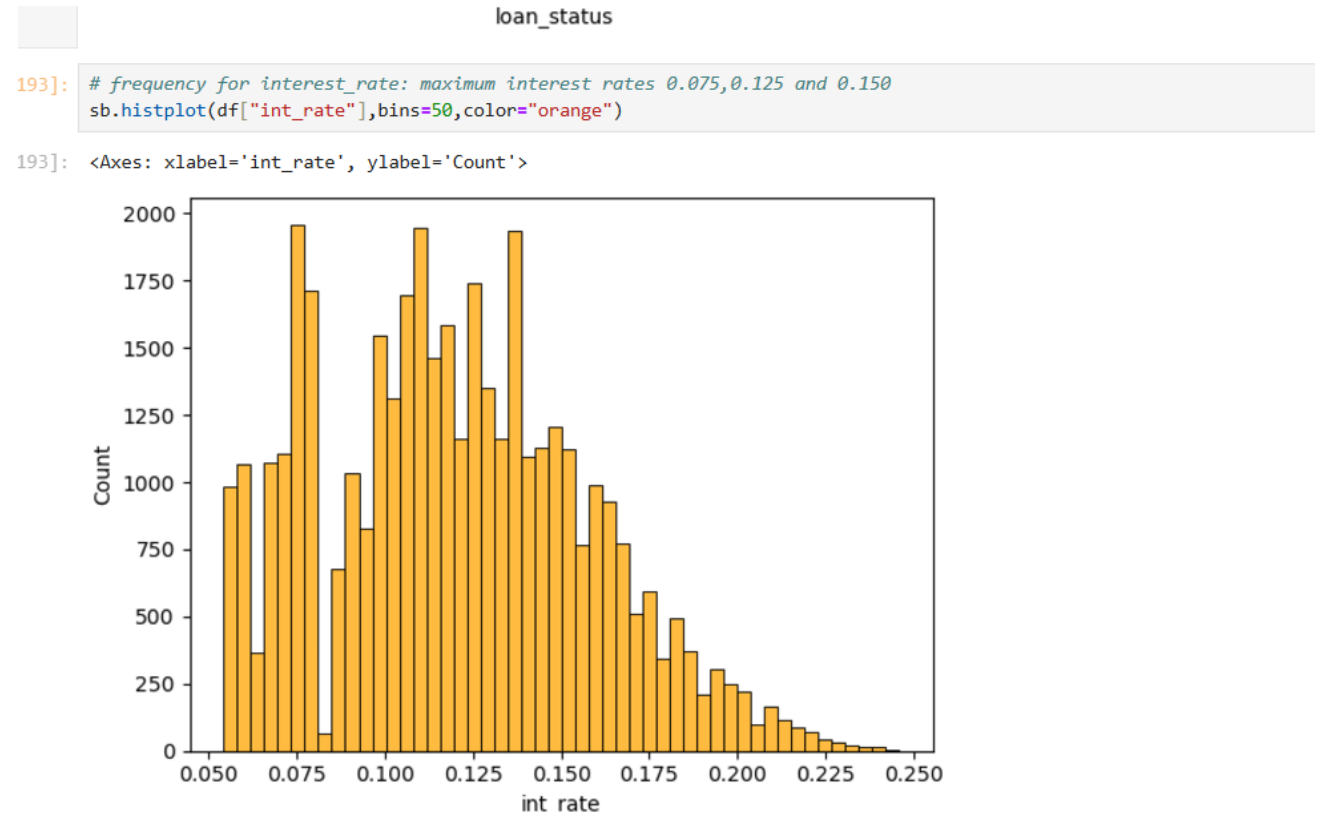
```
[189]: # bi variate analysis between loan_status and interest rate: current applicants have high interest rate  
sb.barplot(data=df,x="loan_status",y="int_rate")  
  
[189]: <Axes: xlabel='loan_status', ylabel='int_rate'>
```





# Histplot for interest rate

Many of the applicants have interest rates between 0.075, 0.125 and 0.150



# Bi Variate Analysis: annual inc and loan status for charged off applicants

Annual income for charged off applicants is  
60000

annual income for charged off applicants using seaborn

```
[269]: #bivariate analysis for charged off applicants: annual income for charged off applicants is 60k  
sb.barplot(data=df1,x=df1["annual_inc"],y=df1["loan_status"])
```

```
[269]: <Axes: xlabel='annual_inc', ylabel='loan_status'>
```

