

# LENDING CLUB CASE STUDY

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# PROBLEM STATEMENT

- The company, which is the largest online loan market place, facilitates personal loans, business loans, and financing of medical procedures as well.
- Understanding the Customer Loan Data, Getting the Defaulters from the variables.

# STEPS

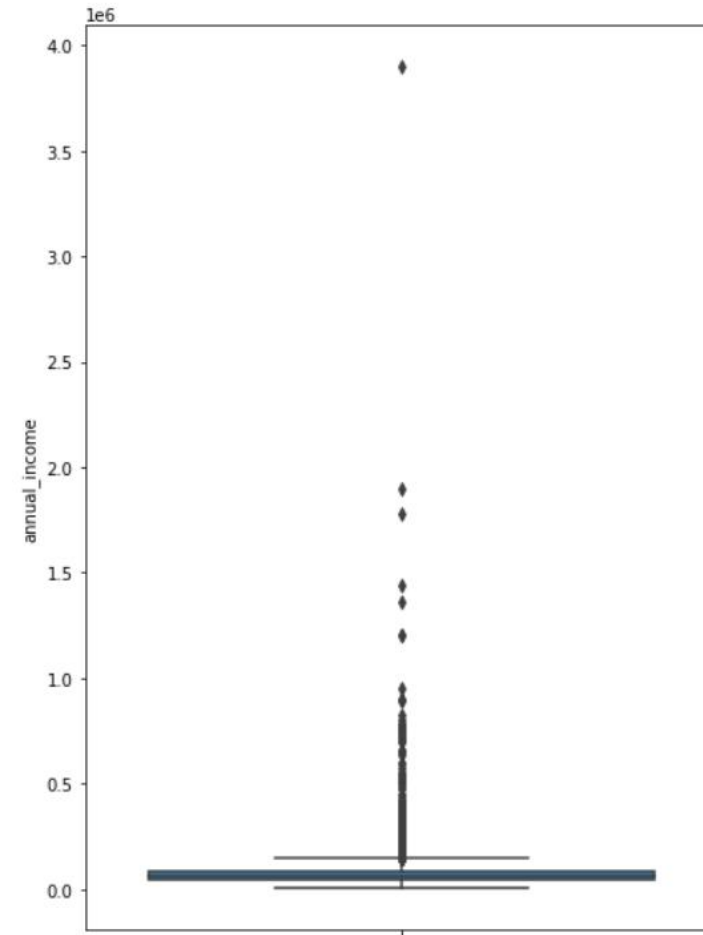
- Importing Modules
- Loading Data
- Data Cleaning
- Detecting Outliers
- UniVariate Analysis
- BiVariate Analysis
- Observation

# Data Cleaning

- Removed Duplicate , Unwanted Observations for both rows and columns
- Outliers was removed

# Handling Outliers

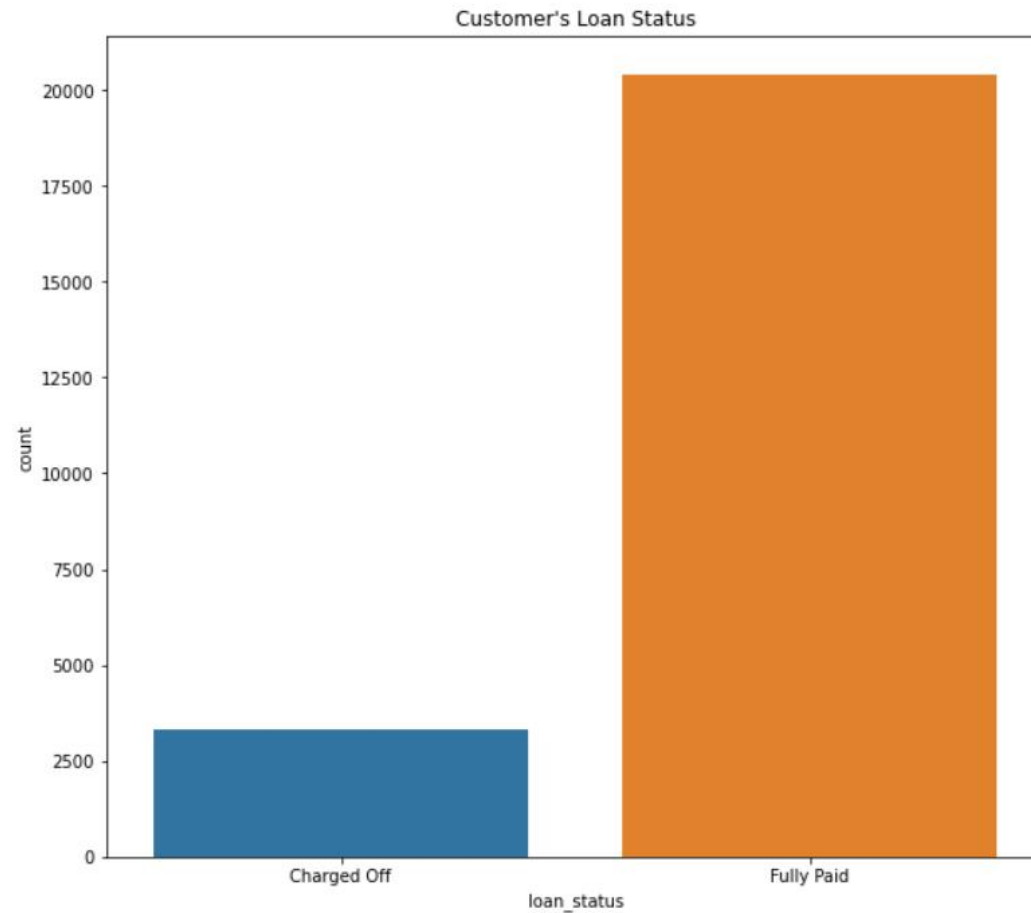
Taken the annual income column  
in the loan data  
and only one value is outlier,  
so have removed that



# Univariate Analysis

## Observations :

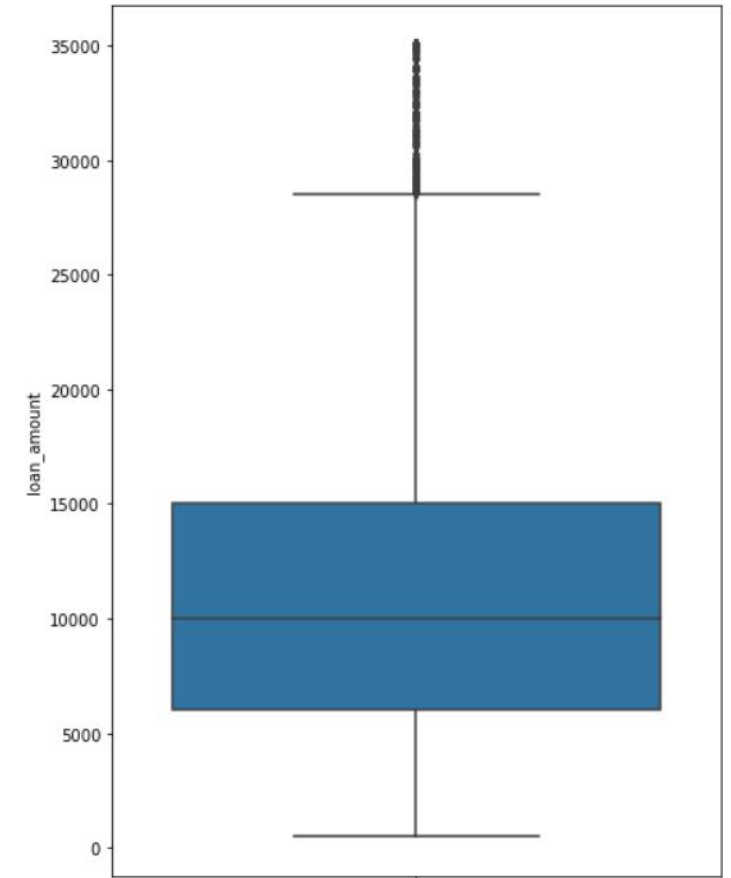
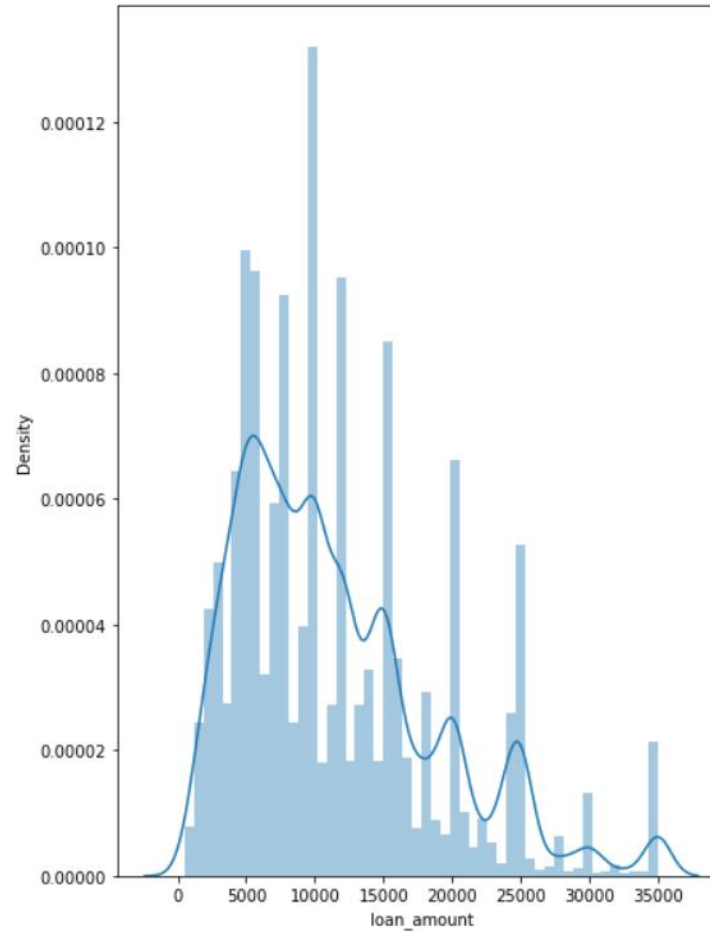
most of the customers are fully paid  
and  
most charged off are around  
3000 to 5000



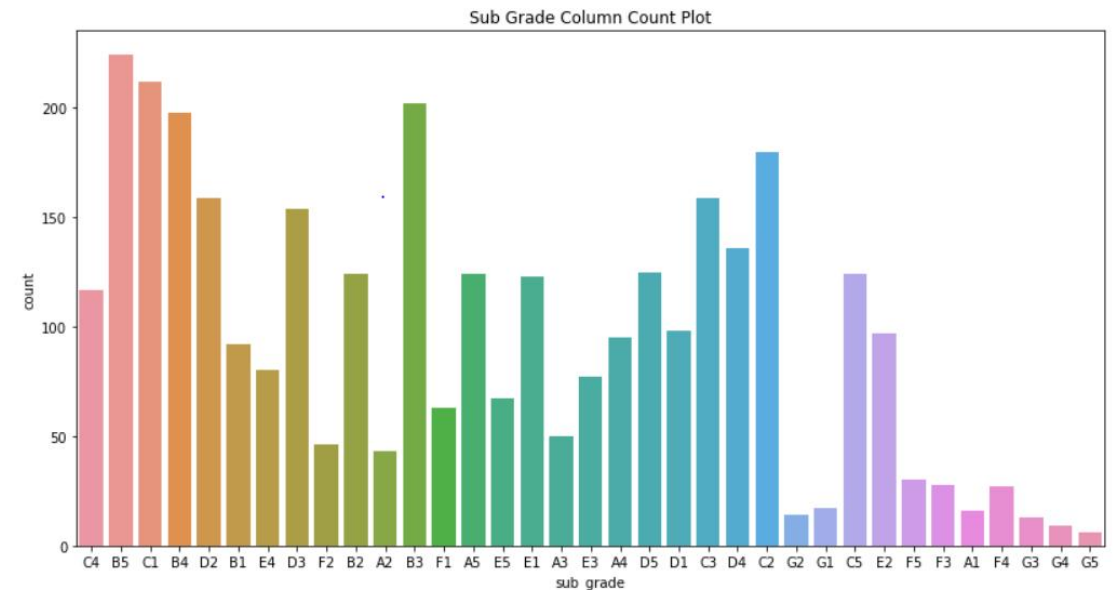
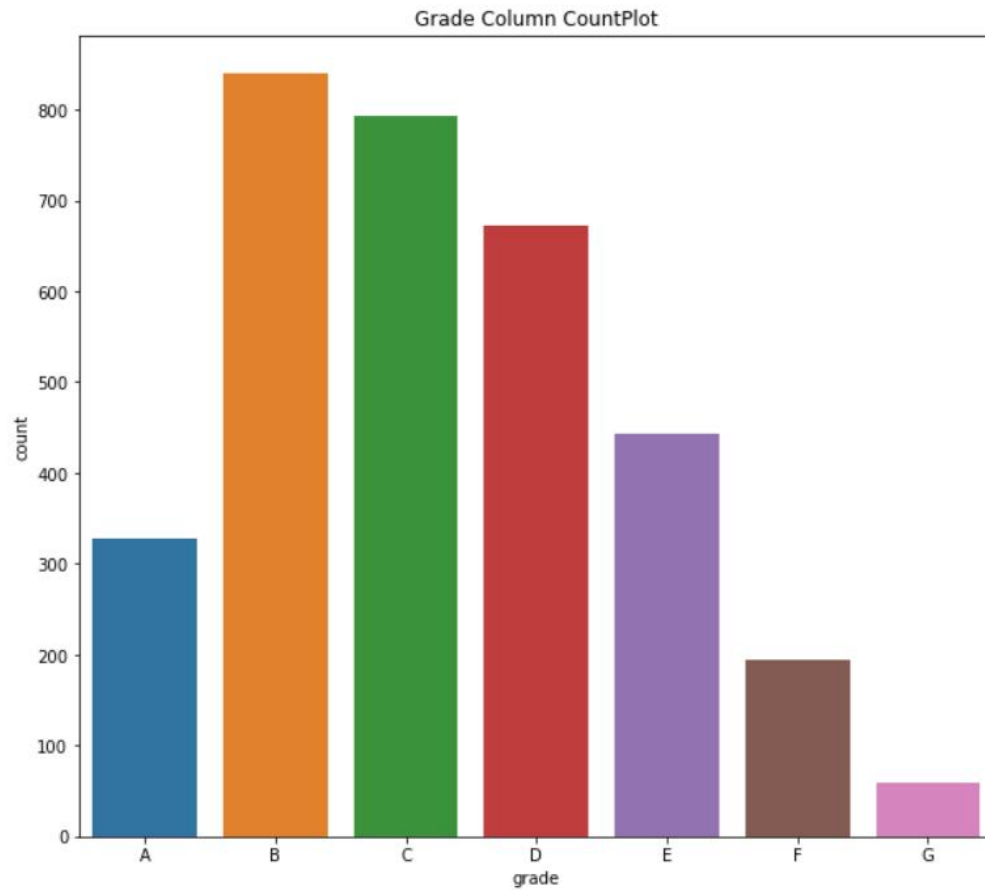
# Univariate Analysis

## Loan Data:

Most of the customers have taken loan of amount 10,000 and also median distribution is 10000 only



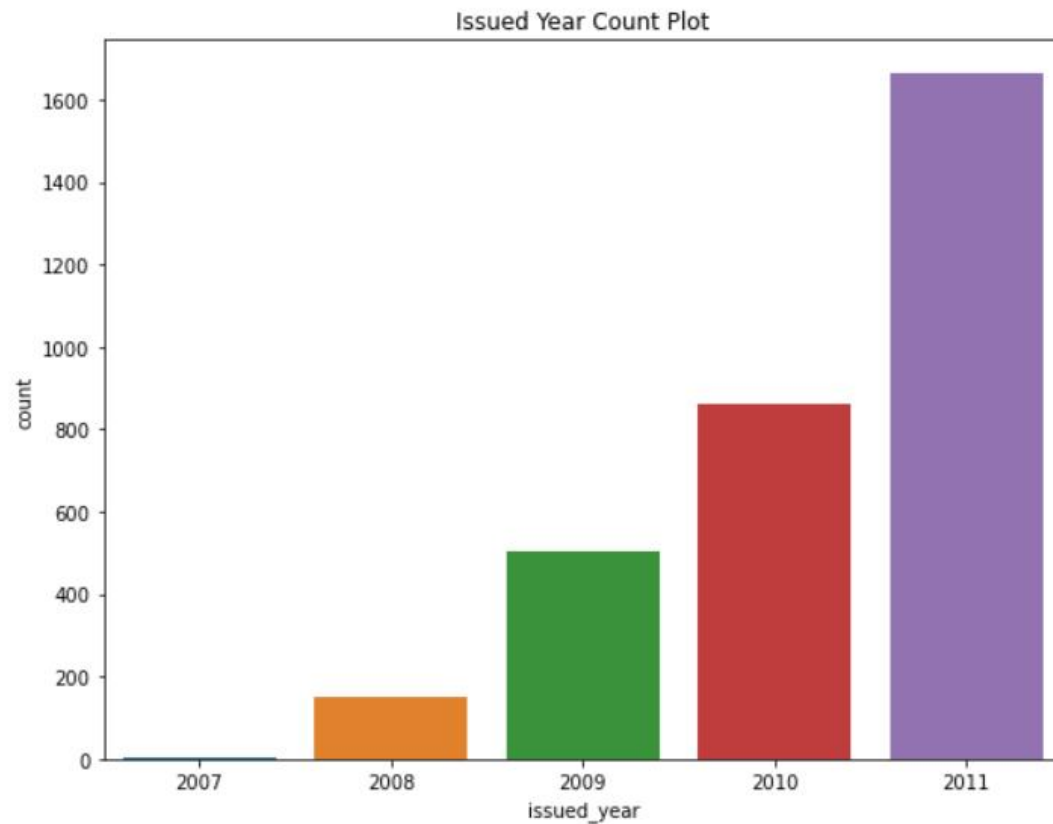
## Grade and Subgrade :



In the Loan Data Majority of the Defaulters are B Grade which are highly possible.

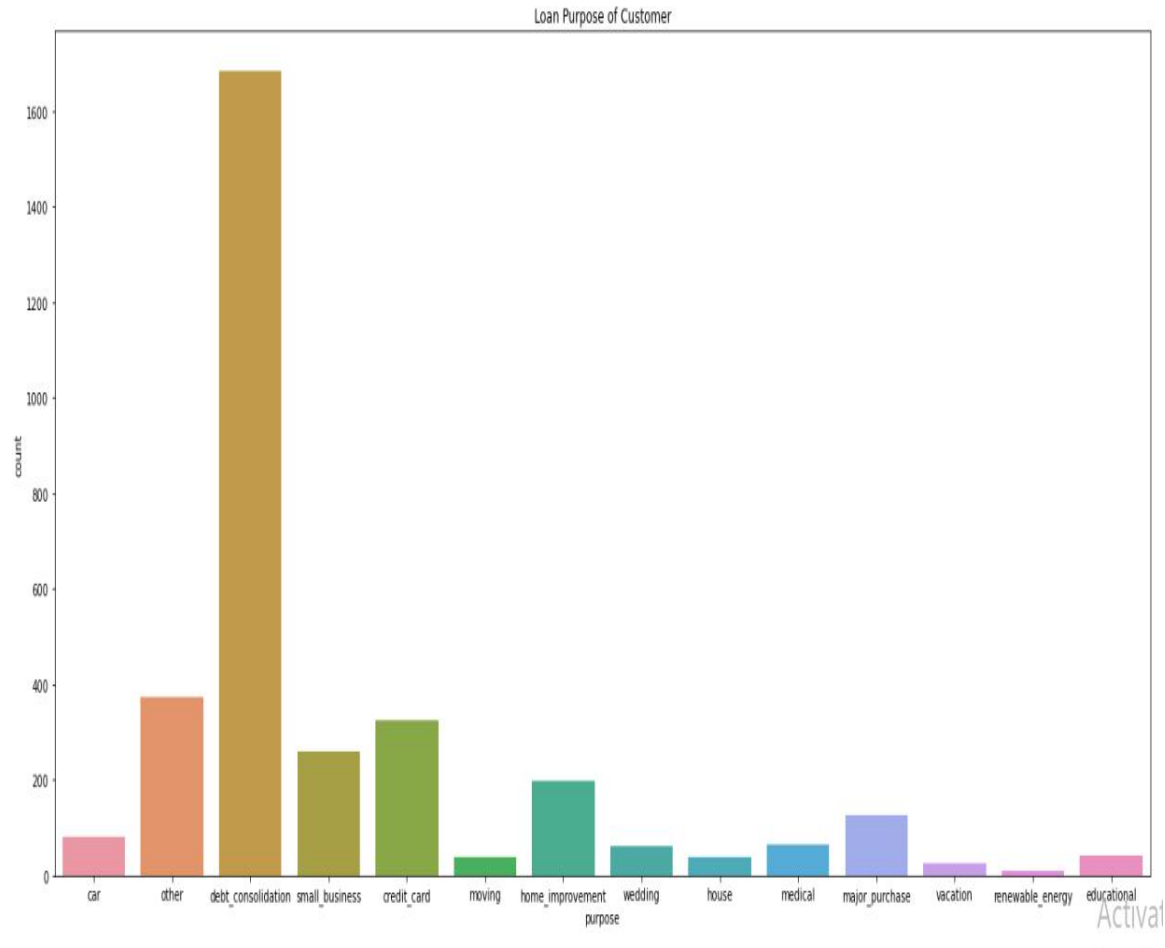


# Issued\_Date:



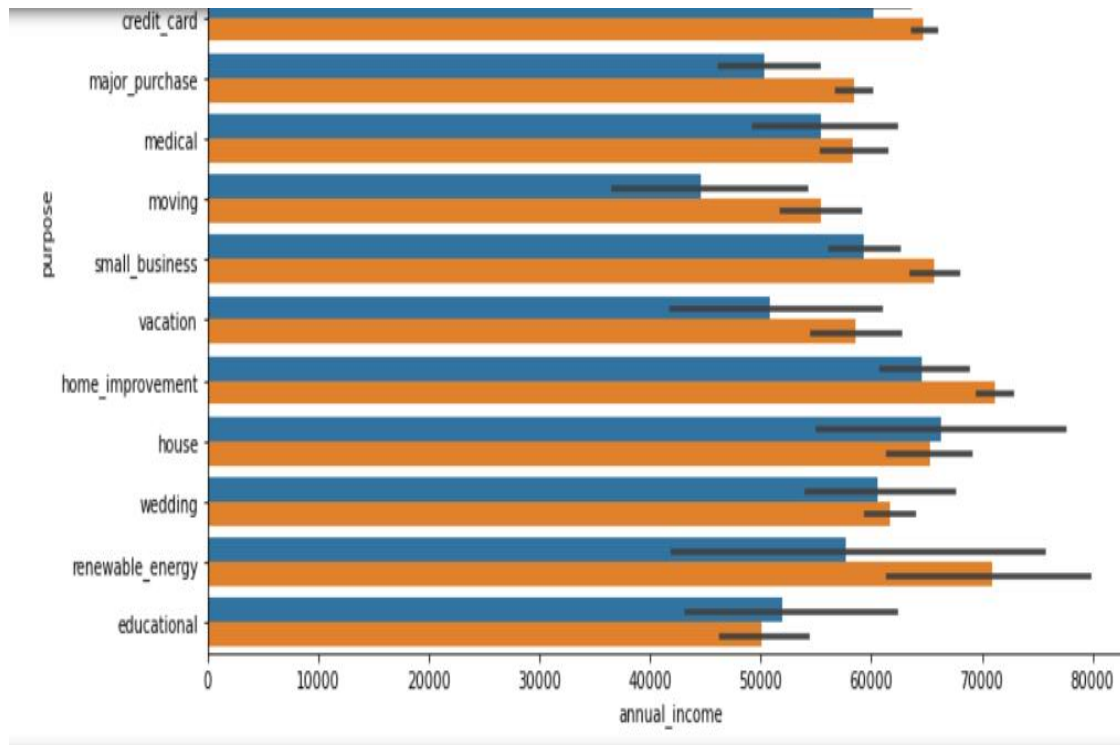
- Based on the Issue date taken Years from that we got to know at 2011 most of them are defaulters
- Also Observed Linear Increase of Defaulters

## Purpose Distribution :



Loan Purpose of the customers are mainly due to debt\_consolidation.

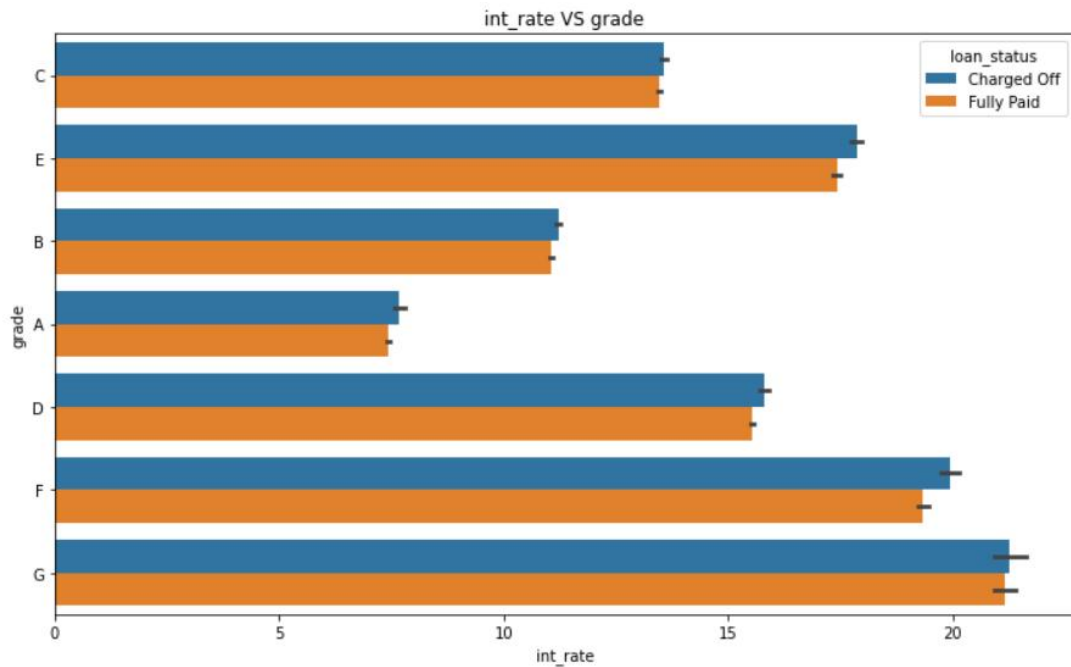
# Bivariate Analysis



## Annual income vs Purpose :

- 60k -70k annual income , who has taken loan for house and home\_improvement are defaulters

int\_rate vs grade :



- G grade customers having most interest rate as well so these are the Defaulters

# Observations & Conclusions

- Customers who are rentals, annual incomes who have around 30k to 60k and purpose is debt\_consolidation are mostly defaulters.
- Average laon amount is 10000.
- Grading System is working as expected.
- Most of the Data has Fully Paid Customers.
- In observations we have concluded who is the defaulters.

THANK YOU