

# Lending Club Case Study

A Lending company is about to take some business decision so we need to do some analysis on the basis of old data.

# Data Understanding

- Take a look of data file manually.
- Get the shape of data frame.
- Get the overall description of data frame.
- Size of data frames.
- Get number of unique columns and rows.

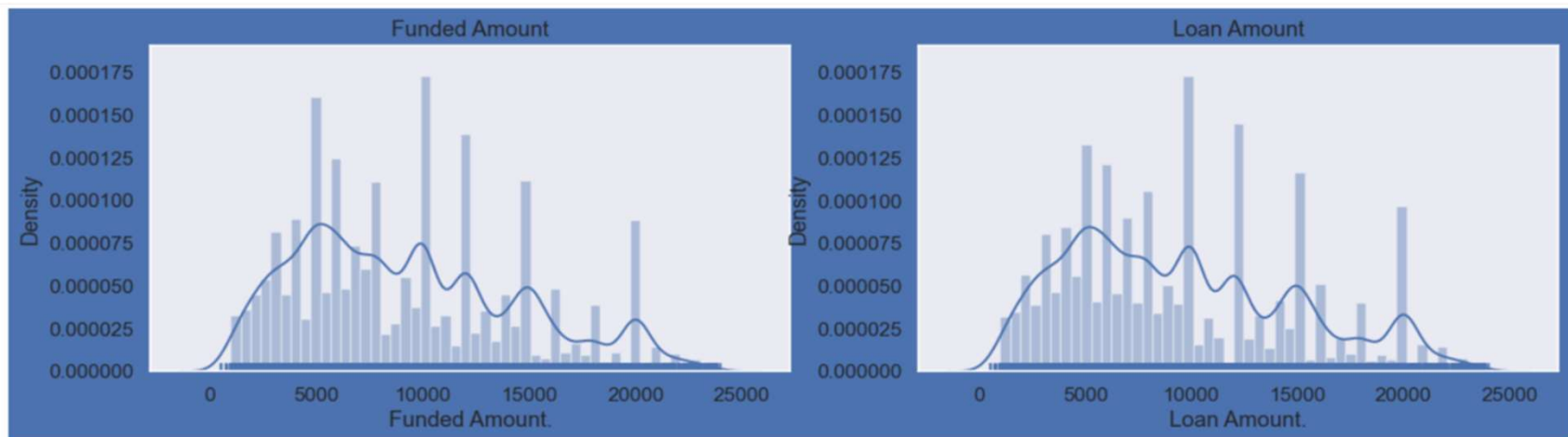
# Data Cleaning

- Find the all duplicate values and remove it from actual dataframe and assign to it.
- Find all null and missing values and replace them with some usefull data e.g. int or float if we have missing data in numeric columns.
- Find outlier and try to remove it if not needed.
- Try to get numeric values for the important columns,we are gonna need in analysis.
- Try to merge two or more columns if needed.

# Univariant Analysis

- In the field of Lending or Loans we have some fixed import columns like loan\_amount , total\_payment ,annual\_income,loan\_status.
- loan\_amount , total\_payment ,annual\_income, should be in numeric format for sure.
- Did univariant analysis for loan\_amount , total\_payment ,annual\_income,loan\_status.
- Get relation between any two or three attribute and plot for each.

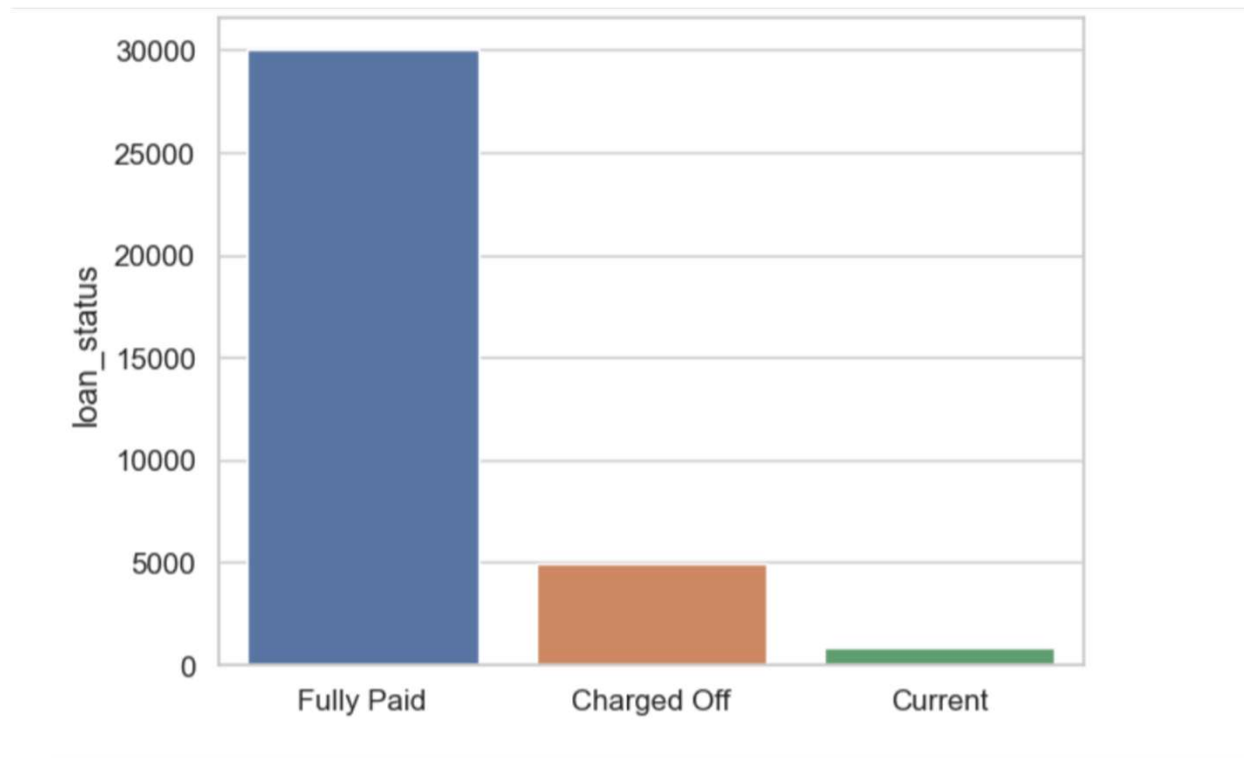
# Loan Amount Vs Funded Amount



# Conclusion

- Most of the people do payback their loans depending on the annual income and house owning condition.
- The people who have taken loan for debt consolidation are the higher in paying it back at full.
- The people who have taken loan for debt consolidation are also the higher in charged off.
- People with higher annual income are more likely to pay it back are less in defaulter.
- Less people lie between the full paying status and defaulter status.

# Loan status vs number of loan application



# Loan Status Vs Loan Purpose

