

**LendingClub**

# LENDING CLUB LOAN CASE STUDY

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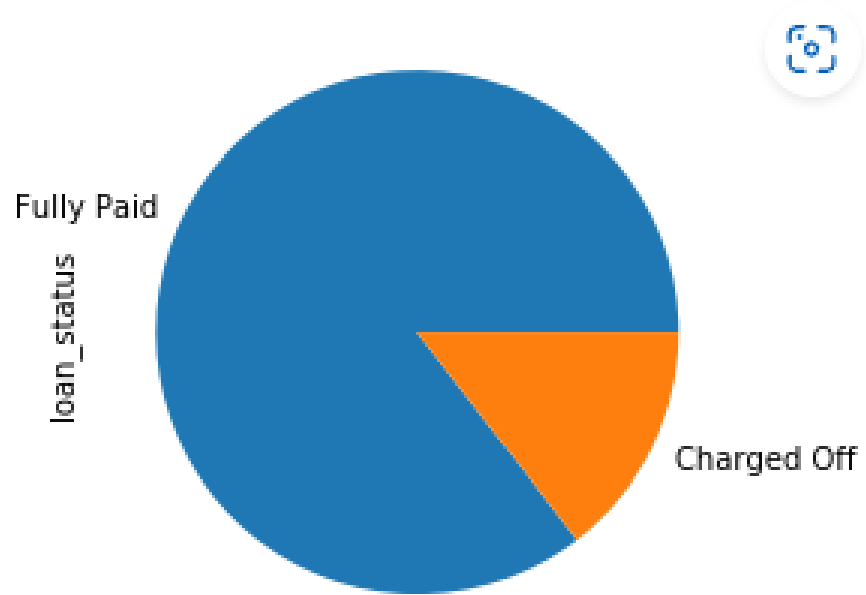
**UNDERSTANDING LOAN ATTRIBUTES INFLUENCE  
THE TENDENCY OF DEFAULT**

# SOLUTION FOR

- Visual statement and the analysis approach of important variable
- Results of univariate, bivariate analysis etc. in business terms
- visualizations and summaries the most important Variables

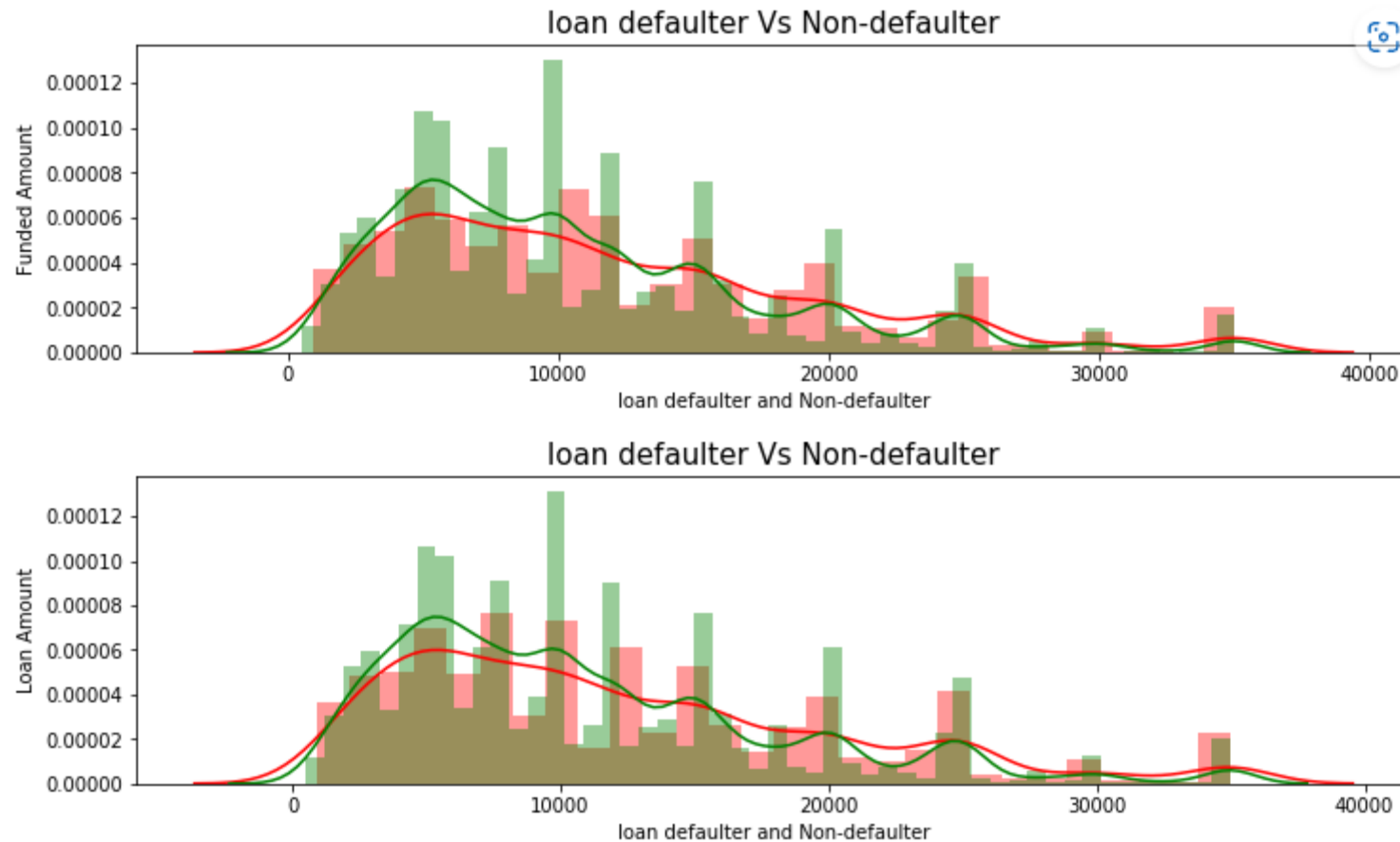


# UNIVARIATE – LOAN STATUS



Pie chart for Fully paid and Charged off

# BIVARIATE – FUNDED AMOUNT AND LOAN DEFaulter



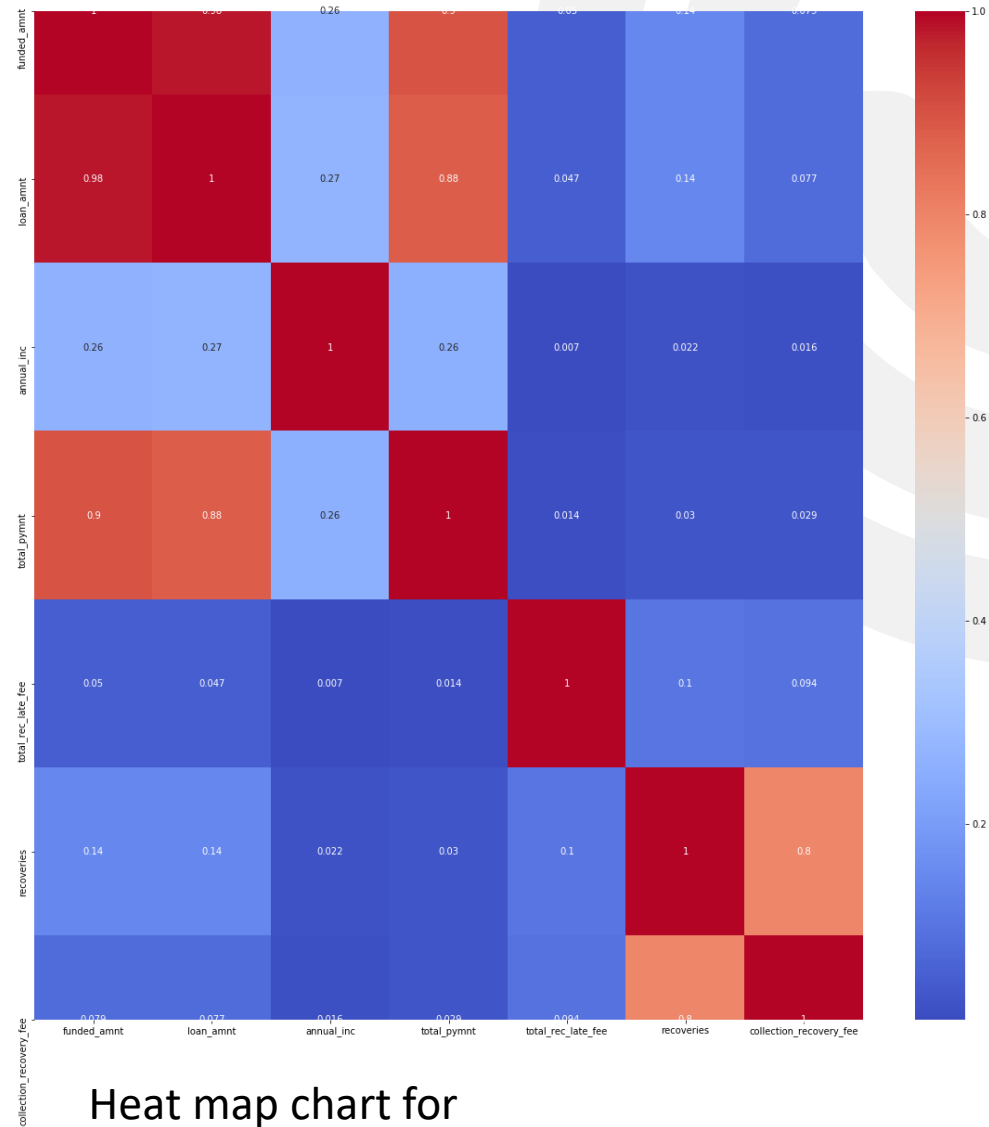
Histogram chart for [loan defaulter and Non-Defaulter](#)

# IMPORTANT VARIABLES TABLE

	loan_status	home_ownership	funded_amnt	loan_amnt	term	emp_length	annual_inc	verification_status	loan_status
0	Fully Paid	RENT	5000	5000	36 months	10+ years	24000.0	Verified	Fully Paid
1	Charged Off	RENT	2500	2500	60 months	< 1 year	30000.0	Source Verified	Charged Off
2	Fully Paid	RENT	2400	2400	36 months	10+ years	12252.0	Not Verified	Fully Paid
3	Fully Paid	RENT	10000	10000	36 months	10+ years	49200.0	Source Verified	Fully Paid
5	Fully Paid	RENT	5000	5000	36 months	3 years	36000.0	Source Verified	Fully Paid
...	...	...	...	...	...	...	...	...	...
39712	Fully Paid	MORTGAGE	2500	2500	36 months	4 years	110000.0	Not Verified	Fully Paid
39713	Fully Paid	RENT	8500	8500	36 months	3 years	18000.0	Not Verified	Fully Paid
39714	Fully Paid	MORTGAGE	5000	5000	36 months	< 1 year	100000.0	Not Verified	Fully Paid
39715	Fully Paid	MORTGAGE	5000	5000	36 months	< 1 year	200000.0	Not Verified	Fully Paid
39716	Fully Paid	OWN	7500	7500	36 months	< 1 year	22000.0	Not Verified	Fully Paid

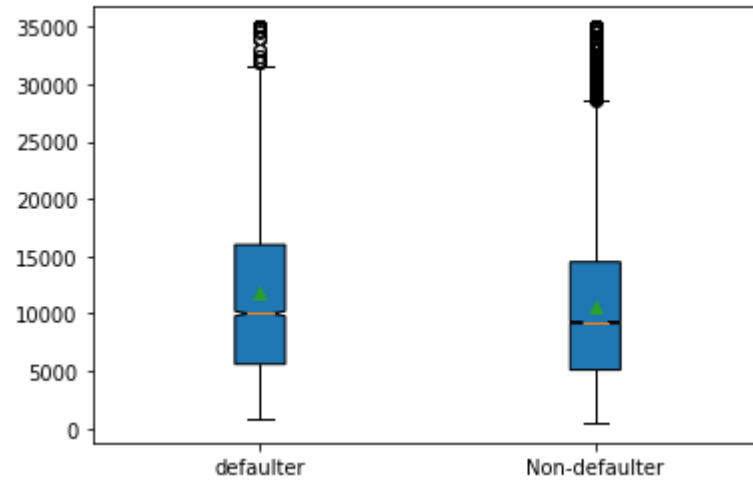
38525 rows × 9 columns

# CHART

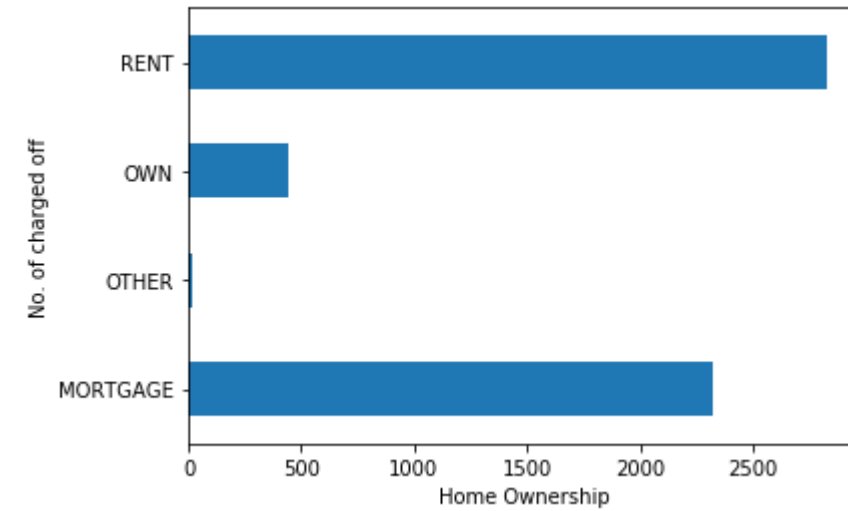


Heat map chart for correlation between important variables

# CHART

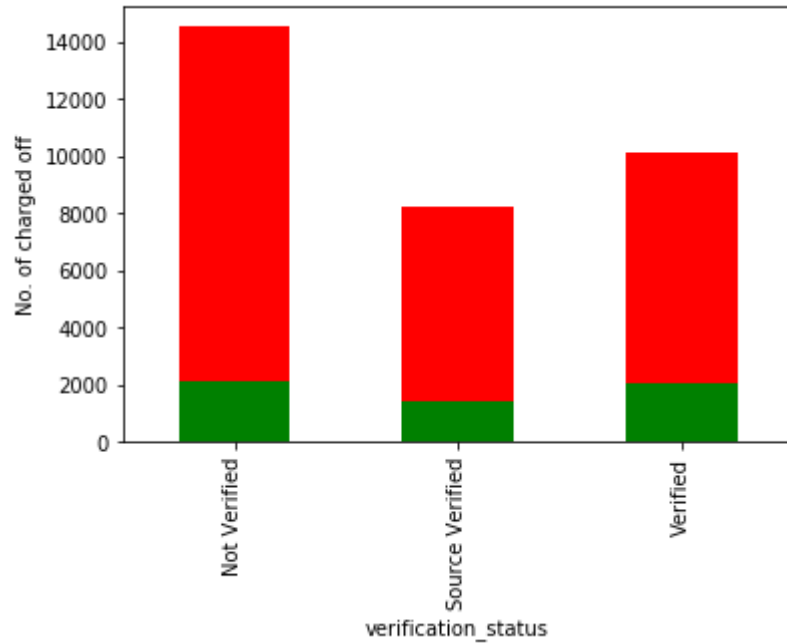


Box Plot for [loan defaulter and Non-Defaulter](#) vs loan amount

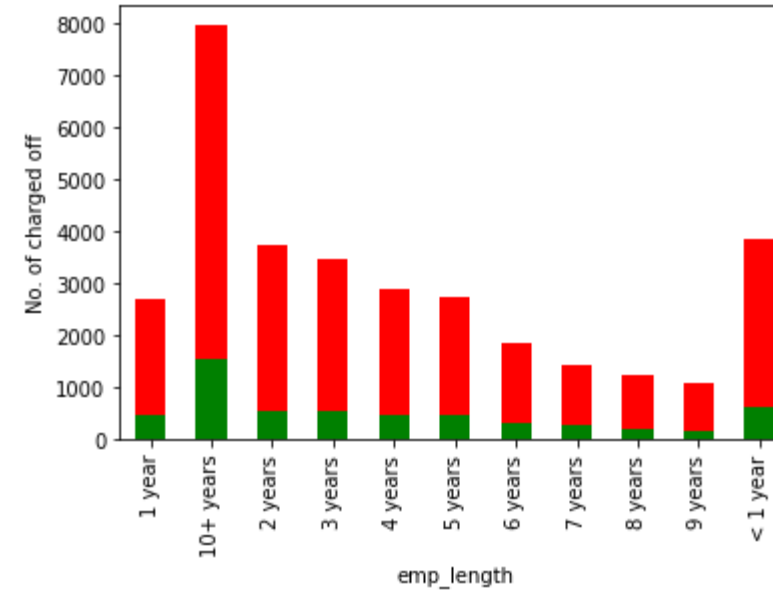


Barh chart for [loan defaulter and Home Ownership](#)

# CHART



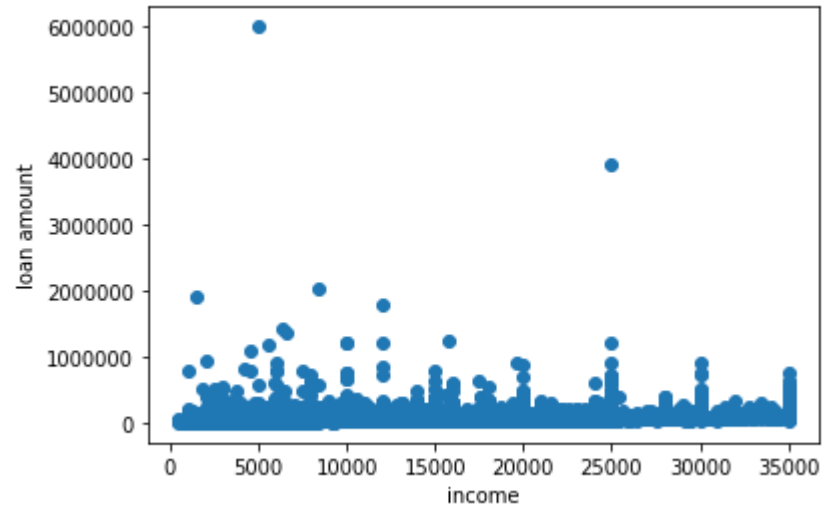
Bar chart Plot for  
loan defaulter and source  
Verified



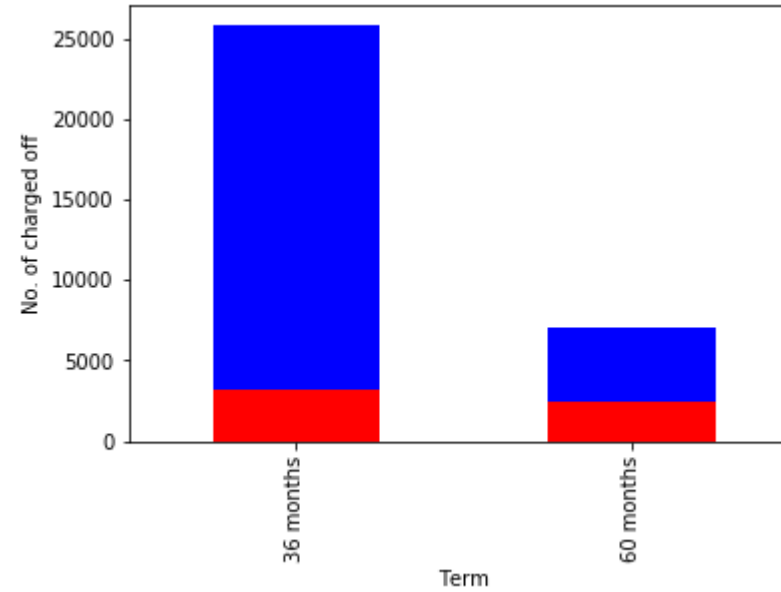
Bar chart for  
loan defaulter and Employee working years



# CHART

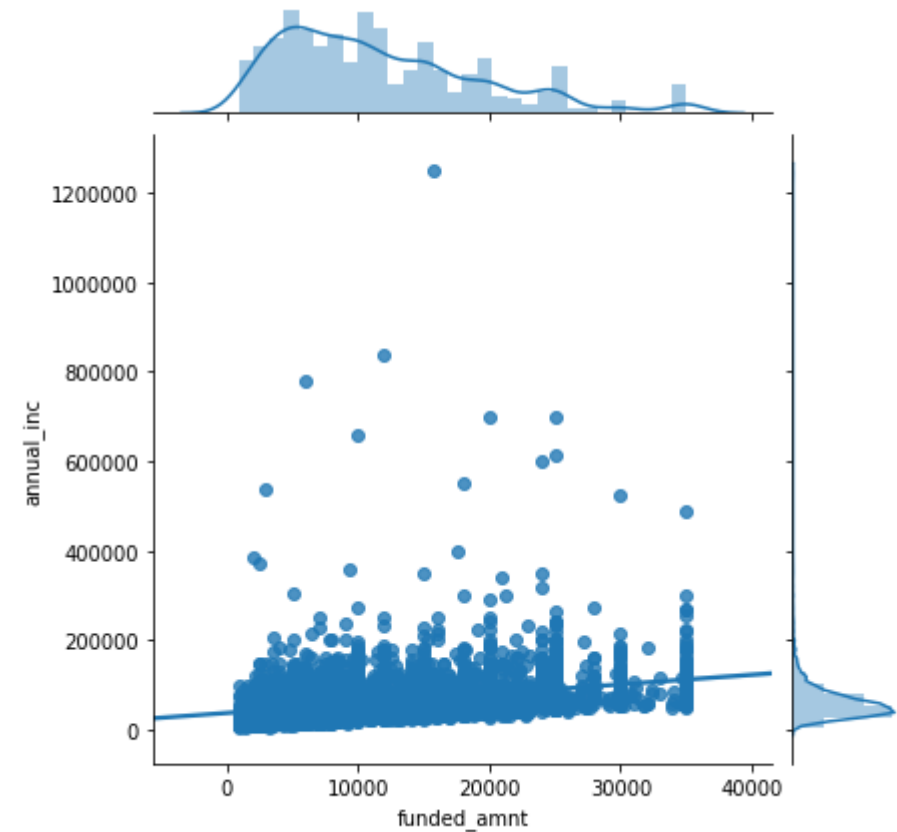
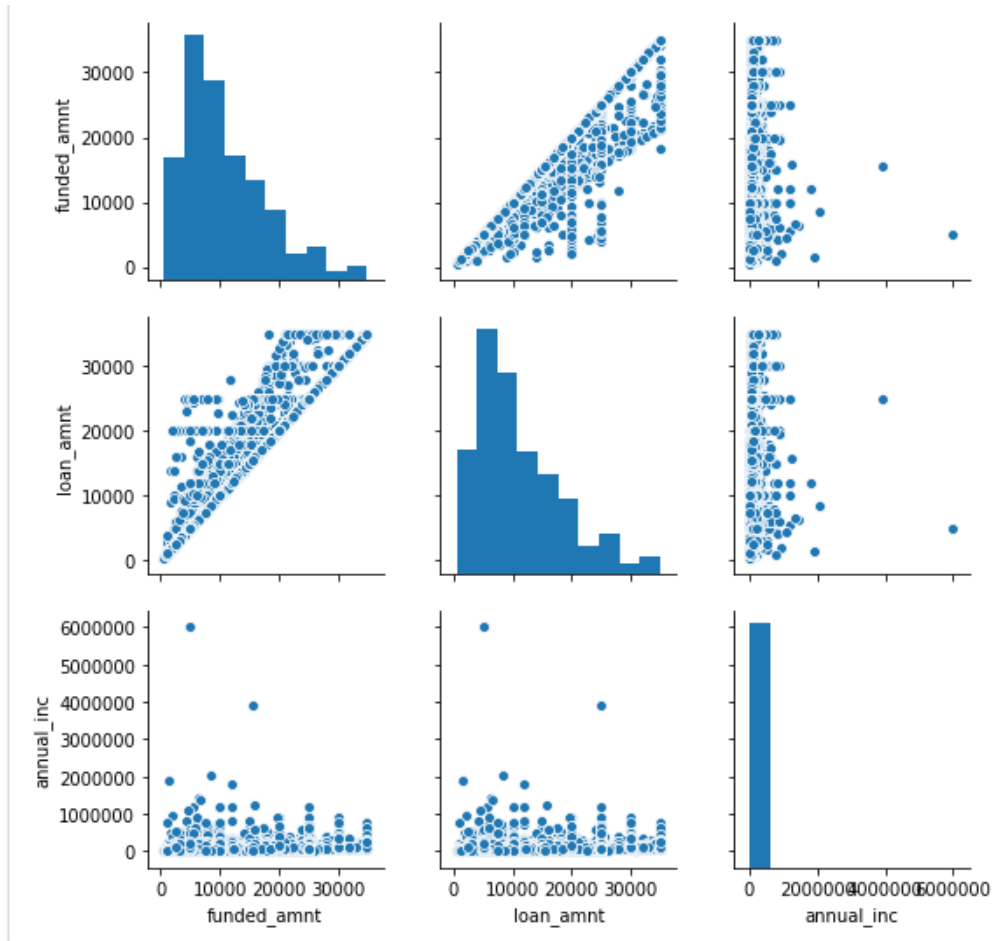


Scatter Plot for **loan defaulter**  
Income vs loan amount



Bar chart for **loan defaulter** vs loan Term

# CHART



Joint plot for **loan defaulter**  
Funded amount and Annual income

Pair Plot for  
Funded Amount, Loan Amount and Annual Income

# THANK YOU

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