]:	
]: [2. Exploratory Data Analysis print("Number of Rows is ", dataframe.shape[0], "\nNumber of colmun is ", dataframe.shape[1]) Number of Rows is 188514 Mumber of Rows is 188514 dataframe.info() <pre> cclass 'pandas.core.frame.bataFrame'> RangeIndex: 188514 entries, 0 to 188513 Bata columns (total 19 columns):</pre>
	### Schecking if there is duplicate
; ! !]:[100000 NaN N
	dataframe.isna().sum() Loan Status
	for i in dataframe['Bankruptcies'].isnull() = True].index:
]: [dataframe('Annual Income').fillna(Annual_mean, inplace=True) dataframe.isna().sum() Loan Status Current Loan Amount O Current Loan Amount O Credit Score O Monthly Debt Vears of Credit History Number of Credit Prolisms O Current Credit Balance O Bankruptcies D Tax Liens O dataframe.duplicated().sum()) dataframe.duplicates(inplace=True) dataframe('Purpose')=dataframe('Purpose').replace(to_replace ="other", value = "Other") Number of Rows is ",dataframe.shape[8] ,"\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n
7]: [8]: [Data conversion to dummy variables dataframe['Loan Status'] = dataframe['Loan Status'].map({'Charged Off':0 ,'Fully Paid':1}) 4. Data visualization correlations = dataframe.corrwith(dataframe['Loan Status']).iloc[:-1].to_frame() correlations['abs'] = correlations.sort_values('abs', ascending=False)[0] fig, ax = plt.subplots(figsize=(5,10)) sns.heatmap(sorted_correlations.to_frame(), cmap='coolwarm', annot=True, vmin=-1, vmax=1, ax=ax) <axessubplot:> Loan Status - 1 1.00</axessubplot:>
	Current Loan Amount - 0.22 Annual Income - 0.049 Years of Credit History - 0.029 - 0.25 Number of Open Accounts0.014 Monthly Debt0.012 Maximum Open Credit - 0.00940.25 Current Credit Balance - 0.0092 Number of Credit Problems0.0066 Years in current job - 0.00430.75
9]:	Category = ['Loan Status', 'Term', 'Years in current job', 'Home Ownership', 'Purpose'] plit. rigure(figsize=(13, 15)) plit. subblack(5,1,1) plit. subblac
	Tears in current job Loan Status 0 Home Mortgage Own Home Mortgage Own Home Mortgage Fent HaveMortgage Loan Status 1
3]:	5. Splitting the dataset into the Training set and Test set
3]:	89593 rows × 31 columns print("Number of Rows is ",dataframe.shape[0] ,"\nNumber of colmun is ",dataframe.shape[1]) Number of Rows is 89593 Number of colmun is 31 X=dataframe.drop('Loan Status',axis=1)
	X=dataframe.drop('Loan Status', axis=1) y=dataframe('Loan Status') # Show pie plot (Approach 1) y.value_counts().plot.ple(autopct='%.if'); 1 74.8 25.2 0
3]:	### ### ##############################
33]: [33]: [33]: [33]: [### Show pic plot (Approach 2) ### Show pic plot (Approach 2) ### Value_counts() plot pic(autopot="%.1f"); ### X_
3]: [3]: [3]: []: []: [### ACCOUNT STATE OF THE PRINT S
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	Part
8]: [8]: [9]: [9]: [1]: [The second of the content of the con