```
1 import numpy as np
2 import pandas as pd
3 import matplotlib.pyplot as plt
4
1 df=pd.read_csv('/content/creditcard.csv')
2 df
```

<ipython-input-117-9b4e49130649>:1: DtypeWarning: Columns (16) have mixed types. Specify dtype option on import or set low_memory=Fa
df=pd.read_csv('/content/creditcard.csv')

NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	!
1.0	0.766127	45.0	Male	South	9120.0	Ownhouse	Self_Emp	Matric	
0.0	0.957151	40.0	Female	South	2600.0	Ownhouse	Self_Emp	Graduate	
0.0	0.658180	38.0	Female	South	3042.0	Ownhouse	Self_Emp	PhD	
0.0	0.233810	30.0	Female	South	3300.0	Ownhouse	Self_Emp	Professional	
0.0	0.907239	49.0	Male	South	63588.0	Ownhouse	Self_Emp	Post-Grad	
0.0	0.246044	58.0	Male	North	NaN	Rented	Officer2	Professional	
0.0	0.000000	30.0	Male	North	5716.0	Rented	Non-officer	Professional	
0.0	0.850283	64.0	Male	North	8158.0	Ownhouse	Self_Emp	Professional	
NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
	\$tatus 1.0 0.0 0.0 0.0 0.0 0.0 0.	status RevolvingutilizationOffunsecuredLines 1.0 0.766127 0.0 0.957151 0.0 0.658180 0.0 0.233810 0.0 0.907239 0.0 0.246044 0.0 0.850283 NaN NaN	status Revolvingutilization of unsecured lines age 1.0 0.766127 45.0 0.0 0.957151 40.0 0.0 0.658180 38.0 0.0 0.233810 30.0 0.0 0.907239 49.0 0.0 0.246044 58.0 0.0 0.850283 64.0 NaN NaN NaN	Status RevolvingutilizationOffunsecuredLines age Gender 1.0 0.766127 45.0 Male 0.0 0.957151 40.0 Female 0.0 0.658180 38.0 Female 0.0 0.233810 30.0 Female 0.0 0.907239 49.0 Male 0.0 0.246044 58.0 Male 0.0 0.850283 64.0 Male NaN NaN NaN	Status RevolvingutilizationOffunsecuredLines age Gender Region 1.0 0.766127 45.0 Male South 0.0 0.957151 40.0 Female South 0.0 0.658180 38.0 Female South 0.0 0.233810 30.0 Female South 0.0 0.907239 49.0 Male South 0.0 0.246044 58.0 Male North 0.0 0.850283 64.0 Male North NaN NaN NaN NaN	Status Revolvingutilizationof-unsecured lines age Gender Region MonthlyIncome 1.0 0.766127 45.0 Male South 9120.0 0.0 0.957151 40.0 Female South 2600.0 0.0 0.658180 38.0 Female South 3042.0 0.0 0.233810 30.0 Female South 3300.0 0.0 0.907239 49.0 Male South 63588.0 0.0 0.246044 58.0 Male North NaN 0.0 0.000000 30.0 Male North 5716.0 0.0 0.850283 64.0 Male North 8158.0 NaN NaN NaN NaN NaN	Status RevolvingutilizationOfUnsecuredLines age Gender Region MonthlyIncome Rented_OwnHouse 1.0 0.766127 45.0 Male South 9120.0 Ownhouse 0.0 0.957151 40.0 Female South 2600.0 Ownhouse 0.0 0.658180 38.0 Female South 3042.0 Ownhouse 0.0 0.233810 30.0 Female South 3300.0 Ownhouse 0.0 0.907239 49.0 Male South 63588.0 Ownhouse 0.0 0.246044 58.0 Male North NaN Rented 0.0 0.000000 30.0 Male North 5716.0 Rented 0.0 0.850283 64.0 Male North 8158.0 Ownhouse NaN NaN NaN NaN NaN NaN NaN NaN	Status Revolvingutilization of Unsecured Lines age Gender Region MonthlyIncome Rented_OwnHouse Occupation 1.0 0.766127 45.0 Male South 9120.0 Ownhouse Self_Emp 0.0 0.957151 40.0 Female South 2600.0 Ownhouse Self_Emp 0.0 0.658180 38.0 Female South 3042.0 Ownhouse Self_Emp 0.0 0.233810 30.0 Female South 3300.0 Ownhouse Self_Emp 0.0 0.907239 49.0 Male South 63588.0 Ownhouse Self_Emp 0.0 0.246044 58.0 Male North NaN Rented Nor-officer 0.0 0.850283 64.0 Male North 8158.0 Ownhouse Self_Emp NaN NaN NaN NaN Na	Status RevolvingUtilizationOfUnsecuredLines age Gender Region MonthlyIncome Rented_OwnHouse Occupation Education 1.0 0.766127 45.0 Male South 9120.0 Ownhouse Self_Emp Matric 0.0 0.957151 40.0 Female South 2600.0 Ownhouse Self_Emp Producte 0.0 0.658180 38.0 Female South 3042.0 Ownhouse Self_Emp Professional 0.0 0.233810 30.0 Female South 3300.0 Ownhouse Self_Emp Professional 0.0 0.907239 49.0 Male South 63588.0 Ownhouse Self_Emp Post-Grad

150002 rows × 18 columns

```
1 \# The Function Function Will be Give the Rows ans Columns Of the Data 2 \mbox{df.shape}
```

→ (150002, 18)

```
1 \# The Columns Function will be Give the Columns of the Dataset 2 df.columns
```

```
Index(['NPA Status', 'RevolvingUtilizationOfUnsecuredLines', 'age', 'Gender', 'Region', 'MonthlyIncome', 'Rented_OwnHouse', 'Occupation', 'Education', 'NumberOfTime30-59DaysPastDueNotWorse', 'DebtRatio', 'MonthlyIncome.1', 'NumberOfOpenCreditLinesAndLoans', 'NumberOfTimes90DaysLate', 'NumberRealEstateLoansOrLines', 'NumberOfTime60-89DaysPastDueNotWorse', 'NumberOfDependents', 'Good_Bad'], dtype='object')
```

1 #The Size Function will be give the number of elements in the Data Set 2 $\operatorname{df.size}$

→ 2700036

1 #Info Function will be give the information about the Data set 2 df.info()

<</pre>
<<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150002 entries, 0 to 150001
Data columns (total 18 columns):

	columns (cocal lo columns).		
#	Column	Non-Null Count	Dtype
0	NPA Status	150000 non-null	float64
1	RevolvingUtilizationOfUnsecuredLines	150000 non-null	float64
2	age	150000 non-null	float64
3	Gender	150000 non-null	object
4	Region	150000 non-null	object
5	MonthlyIncome	120269 non-null	float64
6	Rented_OwnHouse	150000 non-null	object
7	Occupation	150000 non-null	object
8	Education	150000 non-null	object
9	NumberOfTime30-59DaysPastDueNotWorse	150000 non-null	float64
10	DebtRatio	150000 non-null	float64
11	MonthlyIncome.1	120269 non-null	float64
12	NumberOfOpenCreditLinesAndLoans	150000 non-null	float64
13	NumberOfTimes90DaysLate	150000 non-null	float64
14	NumberRealEstateLoansOrLines	150000 non-null	float64
15	NumberOfTime60-89DaysPastDueNotWorse	150000 non-null	float64
16	NumberOfDependents	146078 non-null	object

150000 non-null object

17 Good_Bad dtypes: float64(11), object(7) memory usage: 20.6+ MB

1 # The Describe Function will be Give the Stastical Exploration of the Numarical columns 2 df.describe()

		NPA Status	RevolvingUtilizationOfUnsecuredLines	age	MonthlyIncome	NumberOfTime30- 59DaysPastDueNotWorse	DebtRatio	Month
	count	150000.000000	150000.000000	150000.000000	1.202690e+05	150000.000000	150000.000000	1.
	mean	0.066840	6.048438	52.295207	6.670221e+03	0.421033	353.005076	6.
	std	0.249746	249.755371	14.771866	1.438467e+04	4.192781	2037.818523	1.
	min	0.000000	0.000000	0.000000	0.000000e+00	0.000000	0.000000	0.
	25%	0.000000	0.029867	41.000000	3.400000e+03	0.000000	0.175074	3.
	50%	0.000000	0.154181	52.000000	5.400000e+03	0.000000	0.366508	5.
	75%	0.000000	0.559046	63.000000	8.249000e+03	0.000000	0.868254	8.
	max	1.000000	50708.000000	109.000000	3.008750e+06	98.000000	329664.000000	3.

^{1 #}Head Function Will be Give the First 20 Rows of the Data

² df.head(20)

→	NI Stati	PA us	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	59Day
) 1	.0	0.766127	45.0	Male	South	9120.0	Ownhouse	Self_Emp	Matric	
	1 0	0.0	0.957151	40.0	Female	South	2600.0	Ownhouse	Self_Emp	Graduate	
:	2 0	0.0	0.658180	38.0	Female	South	3042.0	Ownhouse	Self_Emp	PhD	
;	3 0	0.0	0.233810	30.0	Female	South	3300.0	Ownhouse	Self_Emp	Professional	
	4 0	0.0	0.907239	49.0	Male	South	63588.0	Ownhouse	Self_Emp	Post-Grad	
	5 0	0.0	0.213179	74.0	Female	South	3500.0	Ownhouse	Self_Emp	Graduate	
	6 0	0.0	0.305682	57.0	Female	South	NaN	Ownhouse	Self_Emp	PhD	
	7 0	0.0	0.754464	39.0	Female	South	3500.0	Ownhouse	Self_Emp	Post-Grad	
;	3 0	0.0	0.116951	27.0	Female	South	NaN	Ownhouse	Self_Emp	Post-Grad	
!	9 0	0.0	0.189169	57.0	Female	South	23684.0	Ownhouse	Self_Emp	Graduate	
1	0 0	0.0	0.644226	30.0	Male	South	2500.0	Ownhouse	Self_Emp	Post-Grad	
1	1 0	0.0	0.018798	51.0	Female	South	6501.0	Ownhouse	Self_Emp	Post-Grad	
1	2 0	0.0	0.010352	46.0	Female	South	12454.0	Ownhouse	Self_Emp	Post-Grad	
1	3 1	.0	0.964673	40.0	Female	South	13700.0	Ownhouse	Self_Emp	PhD	
1	4 0	0.0	0.019657	76.0	Female	South	0.0	Ownhouse	Self_Emp	Post-Grad	
1	5 0	0.0	0.548458	64.0	Male	South	11362.0	Ownhouse	Self_Emp	Post-Grad	
1	6 0	0.0	0.061086	78.0	Female	South	NaN	Ownhouse	Self_Emp	Graduate	
1	7 0	0.0	0.166284	53.0	Male	South	8800.0	Ownhouse	Self_Emp	Graduate	
1	8 0	0.0	0.221813	43.0	Female	South	3280.0	Ownhouse	Self_Emp	Post-Grad	
1	9 0	0.0	0.602794	25.0	Female	South	333.0	Ownhouse	Self_Emp	Graduate	

^{1 #}The Tail Function Will be Give the Bottom 20 Rows of the Data 2 df.tail(20) $\,$



	NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education :
149982	0.0	0.021046	37.0	Male	North	2760.0	Rented	Officer2	Professional
149983	0.0	0.002485	82.0	Male	North	5000.0	Ownhouse	Non-officer	Professional
149984	0.0	0.037548	84.0	Male	North	NaN	Rented	Self_Emp	Professional
149985	0.0	0.954409	26.0	Male	North	1950.0	Rented	Officer2	Professional
149986	0.0	0.168102	49.0	Male	North	5000.0	Ownhouse	Non-officer	Professional
149987	0.0	1.000000	28.0	Male	North	3249.0	Ownhouse	Self_Emp	Professional
149988	0.0	0.902051	31.0	Male	North	7515.0	Rented	Officer2	Professional
149989	0.0	0.013356	62.0	Male	North	9233.0	Rented	Non-officer	Professional
149990	0.0	0.055518	46.0	Male	North	4335.0	Rented	Self_Emp	Professional
149991	0.0	0.104112	59.0	Male	North	10316.0	Ownhouse	Officer2	Professional
149992	0.0	0.871976	50.0	Male	North	NaN	Ownhouse	Non-officer	Professional
149993	0.0	1.000000	22.0	Male	North	820.0	Ownhouse	Self_Emp	Professional
149994	0.0	0.385742	50.0	Male	North	3400.0	Rented	Officer2	Professional
149995	0.0	0.040674	74.0	Male	North	2100.0	Ownhouse	Non-officer	Professional
149996	0.0	0.299745	44.0	Male	North	5584.0	Ownhouse	Self_Emp	Professional
149997	0.0	0.246044	58.0	Male	North	NaN	Rented	Officer2	Professional
149998	0.0	0.000000	30.0	Male	North	5716.0	Rented	Non-officer	Professional
149999	0.0	0.850283	64.0	Male	North	8158.0	Ownhouse	Self_Emp	Professional
150000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
150001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

^{1 #} The sample Function will be Give the Random Rows in The Dataset

² df.sample(20)

₹		NPA	RevolvingUtilizationOfUnsecuredLines	200	Gandan	Pegion	MonthlyTncome	Rented OwnHouse	Occupation	Education .
		Status	REVOLVINGOLITIZACIONOTONISECUI EULINES	age	delidei	Region	Piontificone	Kenteu_owiniouse	оссирастоп	i i
	8560	1.0	0.000000	45.0	Male	South	4000.0	Ownhouse	Self_Emp	Matric
	39880	0.0	0.120786	82.0	Female	North	NaN	Ownhouse	Officer1	Post-Grad
	35648	0.0	0.213833	63.0	Female	North	NaN	Ownhouse	Self_Emp	Matric
	87426	1.0	0.755408	45.0	Male	North	5400.0	Rented	Non-officer	Graduate
	137235	0.0	0.028658	46.0	Male	West	3750.0	Ownhouse	Officer2	Professional
	20858	0.0	0.072569	71.0	Female	North	8666.0	Rented	Officer3	Post-Grad
	60591	0.0	0.669170	48.0	Male	Central	13000.0	Rented	Non-officer	Professional
	92836	0.0	0.000000	30.0	Male	Central	1849.0	Rented	Self_Emp	Graduate
	63250	1.0	0.430924	36.0	Female	West	NaN	Ownhouse	Self_Emp	PhD
	14115	0.0	0.246551	43.0	Female	North	10390.0	Ownhouse	Officer1	Post-Grad
	97494	1.0	1.000000	50.0	Male	North	3879.0	Rented	Non-officer	Graduate
	23625	0.0	0.028571	46.0	Male	North	7500.0	Rented	Non-officer	Graduate
	5963	0.0	0.012985	62.0	Male	South	NaN	Ownhouse	Self_Emp	Matric
	142284	0.0	0.000318	49.0	Male	West	4200.0	Ownhouse	Officer2	Professional
	42317	0.0	0.132422	52.0	Male	North	8500.0	Ownhouse	Officer1	Post-Grad
	76654	0.0	0.123496	59.0	Female	Central	NaN	Rented	Self_Emp	Professional
	46369	0.0	0.263142	60.0	Female	East	8709.0	Rented	Officer3	Post-Grad
	54864	0.0	0.200309	51.0	Male	East	NaN	Ownhouse	Officer3	Professional
	53774	0.0	0.073151	45.0	Male	East	NaN	Rented	Officer3	Professional
	32808	0.0	0.052900	40.0	Female	North	3336.0	Ownhouse	Non-officer	Graduate

^{1 #}drop duplicates Function will be Drop the Duplicate rows in the data set

² df=df.drop_duplicates()



3 df

	-	_
-	→	₹
	-	_

•	NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	!
	1.0	0.766127	45.0	Male	South	9120.0	Ownhouse	Self_Emp	Matric	
	1 0.0	0.957151	40.0	Female	South	2600.0	Ownhouse	Self_Emp	Graduate	
	2 0.0	0.658180	38.0	Female	South	3042.0	Ownhouse	Self_Emp	PhD	
	0.0	0.233810	30.0	Female	South	3300.0	Ownhouse	Self_Emp	Professional	
	4 0.0	0.907239	49.0	Male	South	63588.0	Ownhouse	Self_Emp	Post-Grad	
149	997 0.0	0.246044	58.0	Male	North	NaN	Rented	Officer2	Professional	
149	998 0.0	0.000000	30.0	Male	North	5716.0	Rented	Non-officer	Professional	
149	999 0.0	0.850283	64.0	Male	North	8158.0	Ownhouse	Self_Emp	Professional	
150	0000 NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
150	0001 NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	

149982 rows × 18 columns

1 df.isnull().sum()



	0
NPA Status	2
Revolving Utilization Of Unsecured Lines	2
age	2
Gender	2
Region	2
MonthlyIncome	29717
Rented_OwnHouse	2
Occupation	2
Education	2
${\bf Number Of Time 30-59 Days Past Due Not Worse}$	2
DebtRatio	2
MonthlyIncome.1	29717
NumberOfOpenCreditLinesAndLoans	2
NumberOfTimes90DaysLate	2
NumberRealEstateLoansOrLines	2
${\bf Number Of Time 60-89 Days Past Due Not Worse}$	2
NumberOfDependents	3923
Good_Bad	2

1 # drop function will be Drop the Coloumns Mention to the Axis=1 -> is Columns axis=0 -> Rows

3 df

² df=df.drop('MonthlyIncome.1',axis=1)



	NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	!
0	1.0	0.766127	45.0	Male	South	9120.0	Ownhouse	Self_Emp	Matric	
1	0.0	0.957151	40.0	Female	South	2600.0	Ownhouse	Self_Emp	Graduate	
2	0.0	0.658180	38.0	Female	South	3042.0	Ownhouse	Self_Emp	PhD	
3	0.0	0.233810	30.0	Female	South	3300.0	Ownhouse	Self_Emp	Professional	
4	0.0	0.907239	49.0	Male	South	63588.0	Ownhouse	Self_Emp	Post-Grad	
149997	0.0	0.246044	58.0	Male	North	NaN	Rented	Officer2	Professional	
149998	0.0	0.000000	30.0	Male	North	5716.0	Rented	Non-officer	Professional	
149999	0.0	0.850283	64.0	Male	North	8158.0	Ownhouse	Self_Emp	Professional	
150000	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
150001	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	

149982 rows × 17 columns

1 # After removing the Columns information
2 df.info()

<class 'pandas.core.frame.DataFrame'>
 Index: 149982 entries, 0 to 150001
 Data columns (total 17 columns):

#	Column	Non-Null Count	Dtype
0	NPA Status	149980 non-null	float64
1	RevolvingUtilizationOfUnsecuredLines	149980 non-null	float64
2	age	149980 non-null	float64
3	Gender	149980 non-null	object
4	Region	149980 non-null	object
5	MonthlyIncome	120265 non-null	float64
6	Rented_OwnHouse	149980 non-null	object
7	Occupation	149980 non-null	object
8	Education	149980 non-null	object
9	NumberOfTime30-59DaysPastDueNotWorse	149980 non-null	float64
10	DebtRatio	149980 non-null	float64
1:	NumberOfOpenCreditLinesAndLoans	149980 non-null	float64
12	NumberOfTimes90DaysLate	149980 non-null	float64
13	NumberRealEstateLoansOrLines	149980 non-null	float64
14	NumberOfTime60-89DaysPastDueNotWorse	149980 non-null	float64
1	NumberOfDependents	146059 non-null	object
16	Good_Bad	149980 non-null	object

dtypes: float64(10), object(7) memory usage: 20.6+ MB

1 df.isnull().sum()



```
0
              NPA Status
                                            2
  RevolvingUtilizationOfUnsecuredLines
                                            2
                 age
               Gender
                                            2
               Region
                                            2
            MonthlyIncome
                                        29717
          Rented_OwnHouse
                                            2
              Occupation
                                            2
              Education
                                            2
NumberOfTime30-59DaysPastDueNotWorse
              DebtRatio
                                            2
  NumberOfOpenCreditLinesAndLoans
      NumberOfTimes90DaysLate
                                            2
    NumberRealEstateLoansOrLines
                                            2
NumberOfTime60-89DaysPastDueNotWorse
                                            2
         NumberOfDependents
                                         3923
              Good_Bad
```

1 # Drops the Enter Row when single Column is null Value
2 df.dropna(subset='Gender',inplace= True,axis=0)

1 df.isnull().sum()



```
1 # MonthlyIncome Mean
```

² df['MonthlyIncome'].mean()

p.float64(6670.4211366565505)

^{1 #}null Values Are Fill The MonthlyIncome mean

² df['MonthlyIncome']=df['MonthlyIncome'].fillna(df['MonthlyIncome'].mean())

1 df

₹		NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	Ē
	0	1.0	0.766127	45.0	Male	South	9120.000000	Ownhouse	Self_Emp	Matric	
	1	0.0	0.957151	40.0	Female	South	2600.000000	Ownhouse	Self_Emp	Graduate	
	2	0.0	0.658180	38.0	Female	South	3042.000000	Ownhouse	Self_Emp	PhD	
	3	0.0	0.233810	30.0	Female	South	3300.000000	Ownhouse	Self_Emp	Professional	
	4	0.0	0.907239	49.0	Male	South	63588.000000	Ownhouse	Self_Emp	Post-Grad	
	149995	0.0	0.040674	74.0	Male	North	2100.000000	Ownhouse	Non-officer	Professional	
	149996	0.0	0.299745	44.0	Male	North	5584.000000	Ownhouse	Self_Emp	Professional	
	149997	0.0	0.246044	58.0	Male	North	6670.421137	Rented	Officer2	Professional	
	149998	0.0	0.000000	30.0	Male	North	5716.000000	Rented	Non-officer	Professional	
	149999	0.0	0.850283	64.0	Male	North	8158.000000	Ownhouse	Self_Emp	Professional	

149980 rows × 17 columns

- 1 # NumberofDepents Finding the Mode
- 2 df['NumberOfDependents'].mode()[0]



- 1 #NumberofDepents null values are Filling to the Mode Function
- 2 df['NumberOfDependents']=df['NumberOfDependents'].fillna(df['NumberOfDependents'].mode()[0])
- 1 #Cross Check of the Null Values
- 2 df.isnull().sum()



dtype: int64

Cross checking the data There is any Null Values

1 df.head(20)

₹		NPA Status	RevolvingUtilizationOfUnsecuredLines	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	59Day
	0	1.0	0.766127	45.0	Male	South	9120.000000	Ownhouse	Self_Emp	Matric	
	1	0.0	0.957151	40.0	Female	South	2600.000000	Ownhouse	Self_Emp	Graduate	
	2	0.0	0.658180	38.0	Female	South	3042.000000	Ownhouse	Self_Emp	PhD	
	3	0.0	0.233810	30.0	Female	South	3300.000000	Ownhouse	Self_Emp	Professional	
	4	0.0	0.907239	49.0	Male	South	63588.000000	Ownhouse	Self_Emp	Post-Grad	
	5	0.0	0.213179	74.0	Female	South	3500.000000	Ownhouse	Self_Emp	Graduate	
	6	0.0	0.305682	57.0	Female	South	6670.421137	Ownhouse	Self_Emp	PhD	
	7	0.0	0.754464	39.0	Female	South	3500.000000	Ownhouse	Self_Emp	Post-Grad	
	8	0.0	0.116951	27.0	Female	South	6670.421137	Ownhouse	Self_Emp	Post-Grad	
	9	0.0	0.189169	57.0	Female	South	23684.000000	Ownhouse	Self_Emp	Graduate	
	10	0.0	0.644226	30.0	Male	South	2500.000000	Ownhouse	Self_Emp	Post-Grad	
	11	0.0	0.018798	51.0	Female	South	6501.000000	Ownhouse	Self_Emp	Post-Grad	
	12	0.0	0.010352	46.0	Female	South	12454.000000	Ownhouse	Self_Emp	Post-Grad	
	13	1.0	0.964673	40.0	Female	South	13700.000000	Ownhouse	Self_Emp	PhD	
	14	0.0	0.019657	76.0	Female	South	0.000000	Ownhouse	Self_Emp	Post-Grad	
	15	0.0	0.548458	64.0	Male	South	11362.000000	Ownhouse	Self_Emp	Post-Grad	
	16	0.0	0.061086	78.0	Female	South	6670.421137	Ownhouse	Self_Emp	Graduate	
	17	0.0	0.166284	53.0	Male	South	8800.000000	Ownhouse	Self_Emp	Graduate	
_	٠.	.1/20)	2 22/2/2			· ··		<u> </u>	~ ·· -		
1 d 	⊤.ta	il(20)						-			
			NPA tus RevolvingUtilizationOfUnsecuredLi	.nes	age Gen	der Reg	ion MonthlyInc	ome Rented_OwnHo	ouse Occupat	ion Educat	ion 5

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_		NPA Status	${\tt RevolvingUtilizationOfUnsecuredLines}$	age	Gender	Region	MonthlyIncome	Rented_OwnHouse	Occupation	Education	5
	149980	0.0	0.067644	64.0	Male	North	5525.000000	Ownhouse	Non-officer	Professional	
	149981	0.0	0.810012	43.0	Male	North	6849.000000	Ownhouse	Self_Emp	Professional	
	149982	0.0	0.021046	37.0	Male	North	2760.000000	Rented	Officer2	Professional	
	149983	0.0	0.002485	82.0	Male	North	5000.000000	Ownhouse	Non-officer	Professional	
	149984	0.0	0.037548	84.0	Male	North	6670.421137	Rented	Self_Emp	Professional	
	149985	0.0	0.954409	26.0	Male	North	1950.000000	Rented	Officer2	Professional	
	149986	0.0	0.168102	49.0	Male	North	5000.000000	Ownhouse	Non-officer	Professional	
	149987	0.0	1.000000	28.0	Male	North	3249.000000	Ownhouse	Self_Emp	Professional	
	149988	0.0	0.902051	31.0	Male	North	7515.000000	Rented	Officer2	Professional	
	149989	0.0	0.013356	62.0	Male	North	9233.000000	Rented	Non-officer	Professional	
	149990	0.0	0.055518	46.0	Male	North	4335.000000	Rented	Self_Emp	Professional	
	149991	0.0	0.104112	59.0	Male	North	10316.000000	Ownhouse	Officer2	Professional	
	149992	0.0	0.871976	50.0	Male	North	6670.421137	Ownhouse	Non-officer	Professional	
	149993	0.0	1.000000	22.0	Male	North	820.000000	Ownhouse	Self_Emp	Professional	
	149994	0.0	0.385742	50.0	Male	North	3400.000000	Rented	Officer2	Professional	
	149995	0.0	0.040674	74.0	Male	North	2100.000000	Ownhouse	Non-officer	Professional	
	149996	0.0	0.299745	44.0	Male	North	5584.000000	Ownhouse	Self_Emp	Professional	
	149997	0.0	0.246044	58.0	Male	North	6670.421137	Rented	Officer2	Professional	
	149998	0.0	0.000000	30.0	Male	North	5716.000000	Rented	Non-officer	Professional	
	149999	0.0	0.850283	64.0	Male	North	8158.000000	Ownhouse	Self_Emp	Professional	

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NPA Status RevolvingUtilizationOfUnsecuredLines age Gender Region MonthlyIncome Rented_OwnHouse Occupation Education 5