Assigment -2
Data Visualization & Pre-processing

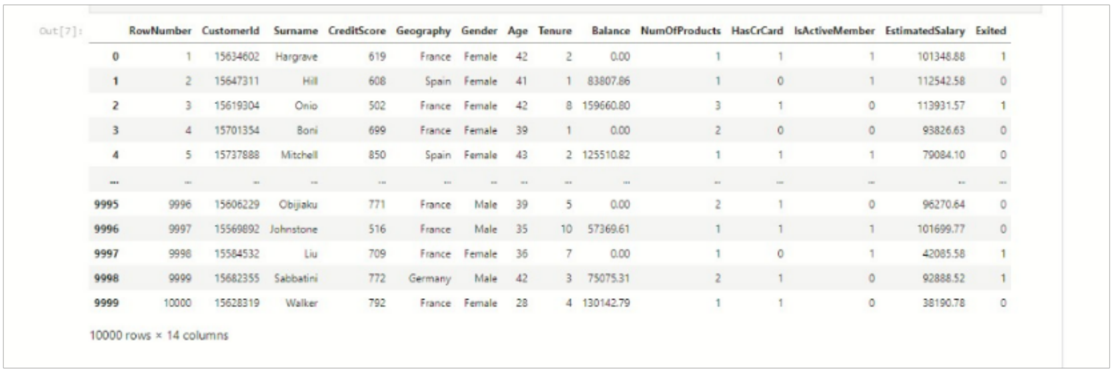
Assigment Date	22 September 2022
Student Name	Miss.Arunadevi A
Student Roll Number	620119106008
Maximum Marks	2 Marks

Question-1:

1.Dataset downloaded as "model.csv"

2.Load the dataset

```
#importing libraries
import pandas as pd
#load the dataset
df=pd.read_csv("model.csv")
df
```

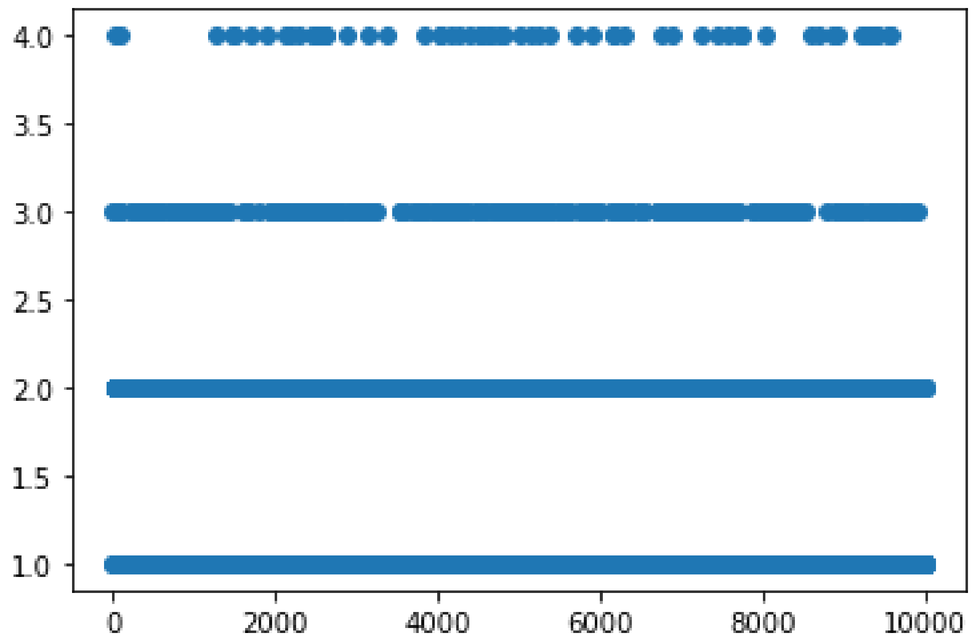


```
Out[7]:
      RowNumber  CustomerId    Surname  CreditScore  Geography  Gender  Age  Tenure    Balance  NumOfProducts  HasCrCard  IsActiveMember  EstimatedSalary  Exited
   0          1    15634602   Hargrave          619     France  Female   42       2       0.00              1          1               1        101348.88       1
   1          2    15647311       Hill          608      Spain  Female   41       1   83807.86              1          0               1        112542.58       0
   2          3    15619304       Onio          502     France  Female   42       8  159660.80              3          1               0        113931.57       1
   3          4    15701354       Boni          699     France  Female   39       1       0.00              2          0               0         93826.63       0
   4          5    15737888   Mitchell          850      Spain  Female   43       2  125510.82              1          1               1         79084.10       0
 ...        ...         ...        ...          ...        ...     ...  ...     ...        ...            ...        ...             ...              ...     ...
9995       9996    15606229   Obijiaku          771     France    Male   39       5       0.00              2          1               0         96270.64       0
9996       9997    15569892  Johnstone          516     France    Male   35      10   57369.61              1          1               1        101699.77       0
9997       9998    15584532        Liu          709     France  Female   36       7       0.00              1          0               1         42085.58       1
9998       9999    15682355  Sabbatini          772    Germany    Male   42       3   75075.31              2          1               0         92888.52       1
9999      10000    15628319     Walker          792     France  Female   28       4  130142.79              1          1               0         38190.78       0

10000 rows × 14 columns
```

3. Perform Below Visualizations

3.1 Univariate Analysis

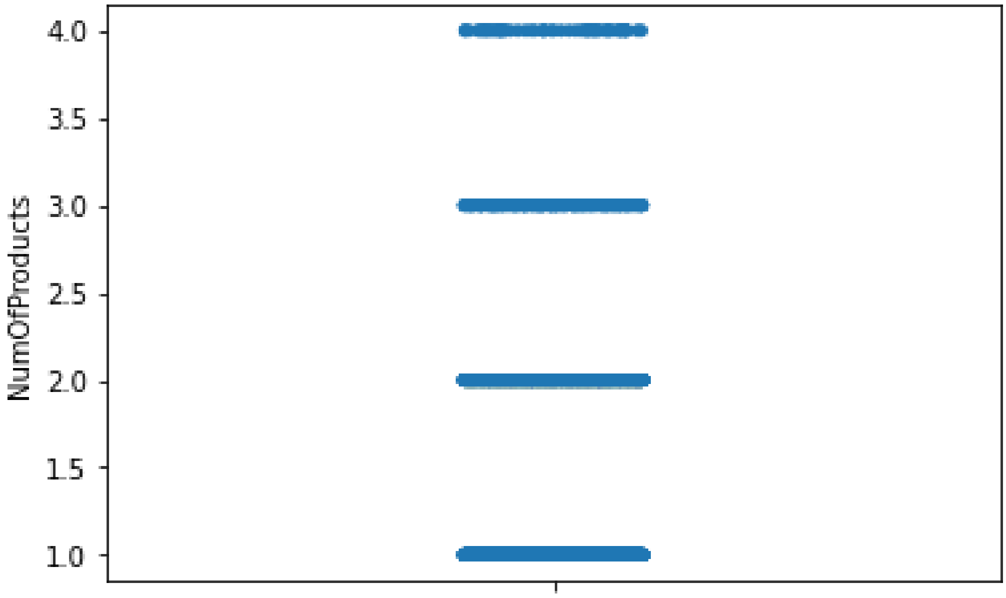
```
#scatterplot
import matplotlib.pyplot as plt
import pandas as pd
import seaborn as sns
#load the dataset
df=pd.read_csv("model.csv")
plt.scatter(df.index,df['NumOfProducts'])
plt.show()
```



```
#strip plot
sns.stripplot(y=df['NumOfProducts'])
```

```
<AxesSubplot:ylabel='NumOfProducts'>
```

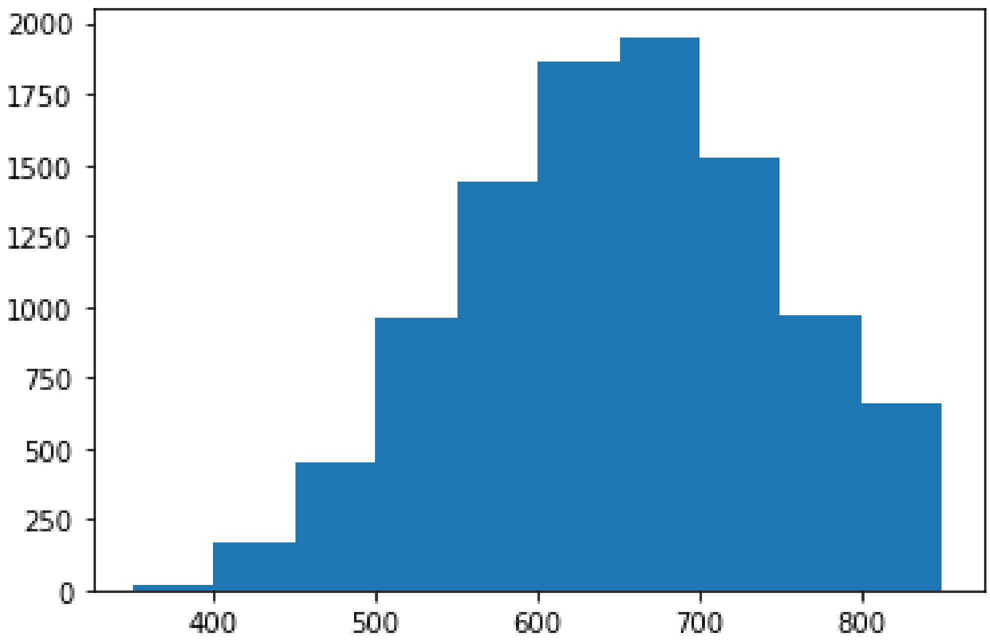
Out[7]



```
#histogram
plt.hist(df['CreditScore'])
```

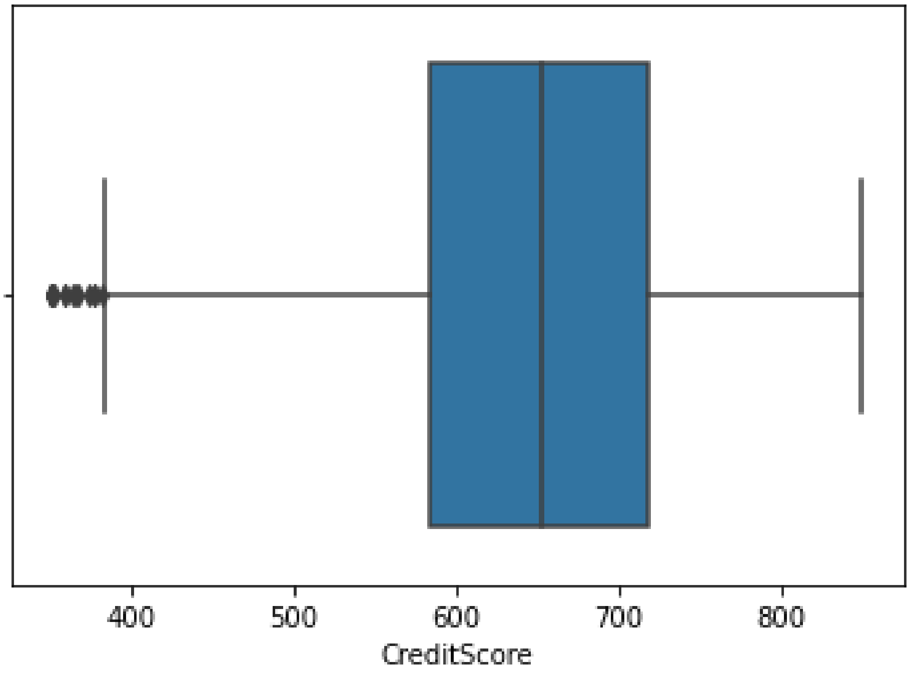
Out[8]:

```
(array([  19.,  166.,  447.,  958., 1444., 1866., 1952., 1525.,  968.,
         655.]),
 array([350., 400., 450., 500., 550., 600., 650., 700., 750., 800., 850.]),
 <BarContainer object of 10 artists>)
```



```
#boxplot
sns.boxplot(df['CreditScore'])
```

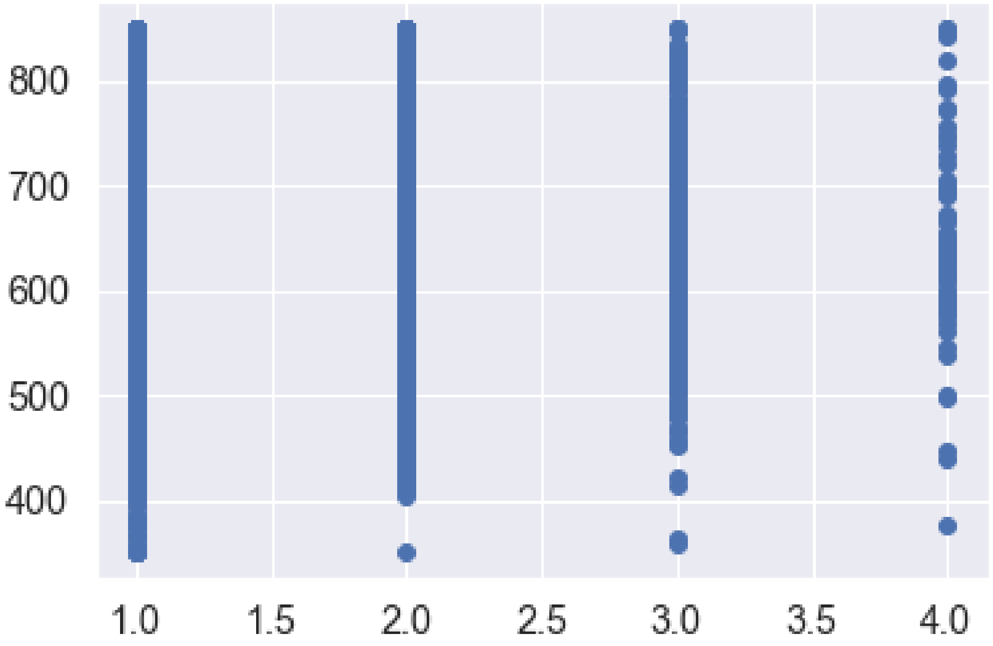
```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variable as a k
eyword arg: x. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an expli
cit keyword will result in an error or misinterpretation.
  warnings.warn(
Out[10]:
<AxesSubplot:xlabel='CreditScore'>
```



3.2 Bivariate Analysis

In[21]:

```
#scatter plot
plt.scatter(df.NumOfProducts,df.CreditScore)
plt.show()
```

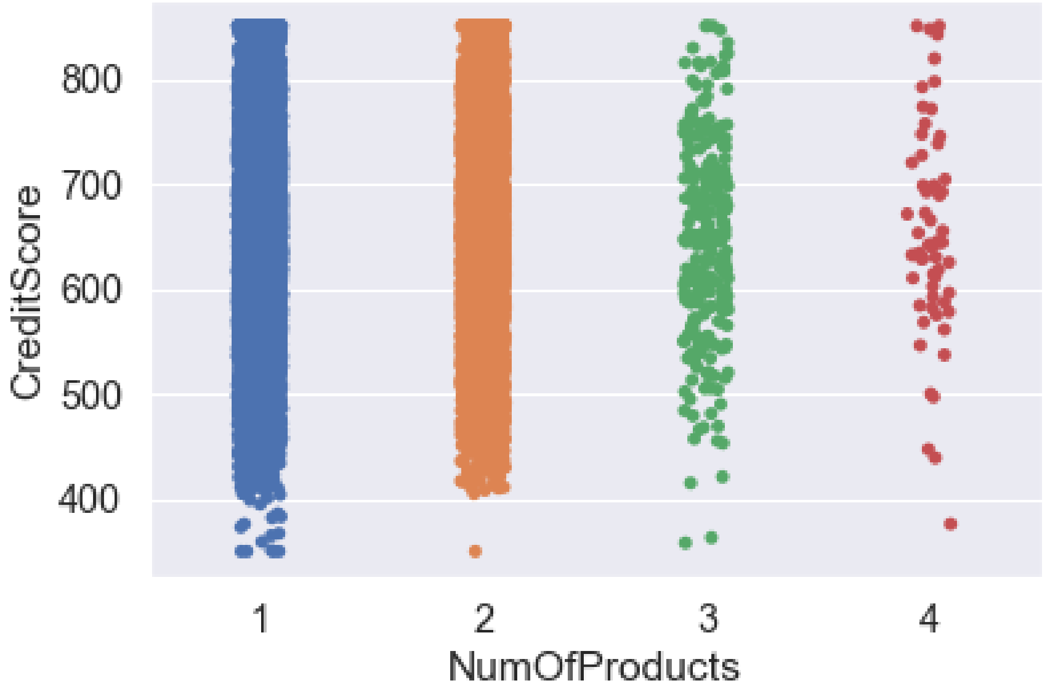


In[22]:

```
#strip plot
sns.stripplot(x=df['NumOfProducts'],y=df['CreditScore'])
```

Out[22]:

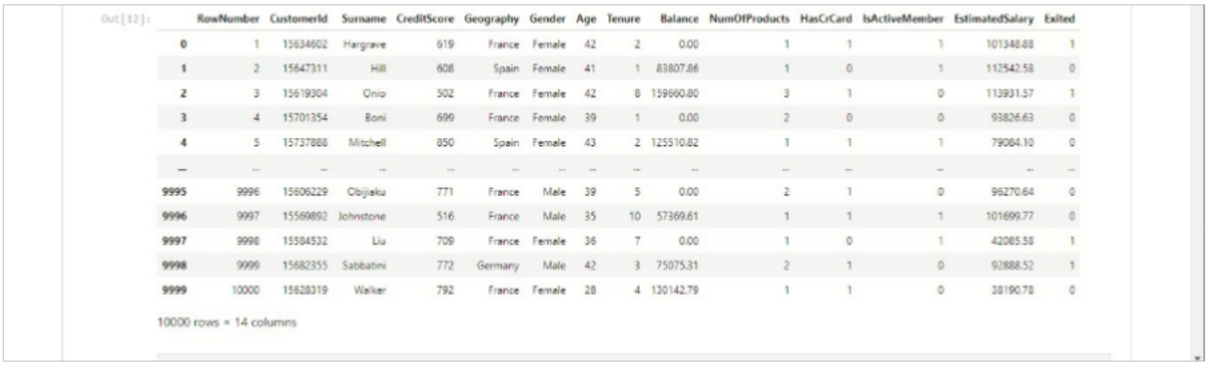
```
<AxesSubplot:xlabel='NumOfProducts', ylabel='CreditScore'>
```



3.3 Mulitivariate Analysis

In[12]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

sns.set_style('darkgrid')
sns.set(font_scale=1.3)

df=pd.read_csv('model.csv')
df
```

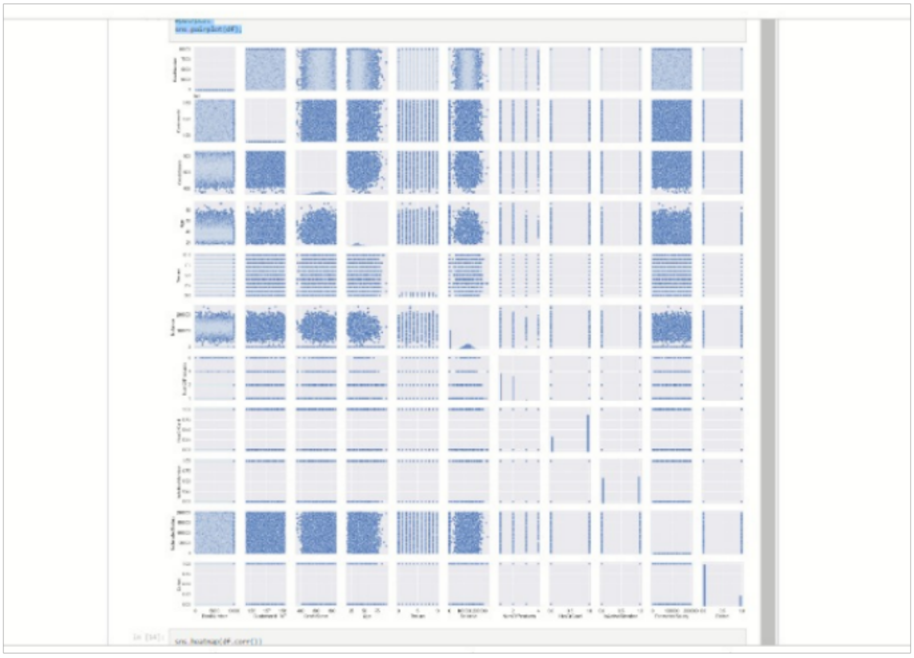


Out[12]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
0	1	15634602	Hargrave	619	France	Female	42	2	0.00	1	1	1	101348.88	1
1	2	15647311	Hill	608	Spain	Female	41	1	83807.86	1	0	1	112542.58	0
2	3	15619304	Onio	502	France	Female	42	8	159660.80	3	1	0	113931.57	1
3	4	15701354	Boni	699	France	Female	39	1	0.00	2	0	0	93826.63	0
4	5	15737888	Mitchell	850	Spain	Female	43	2	125510.82	1	1	1	79084.10	0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9995	9996	15606229	Obijiaku	771	France	Male	39	5	0.00	2	1	0	96270.64	0
9996	9997	15569892	Johnstone	516	France	Male	35	10	57369.61	1	1	1	101699.77	0
9997	9998	15584532	Liu	709	France	Female	36	7	0.00	1	0	1	42085.58	1
9998	9999	15682355	Sabbatini	772	Germany	Male	42	3	75075.31	2	1	0	92888.52	1
9999	10000	15628319	Walker	792	France	Female	28	4	130142.79	1	1	0	38190.78	0

10000 rows × 14 columns

```
#pairplot
sns.pairplot(df);
```



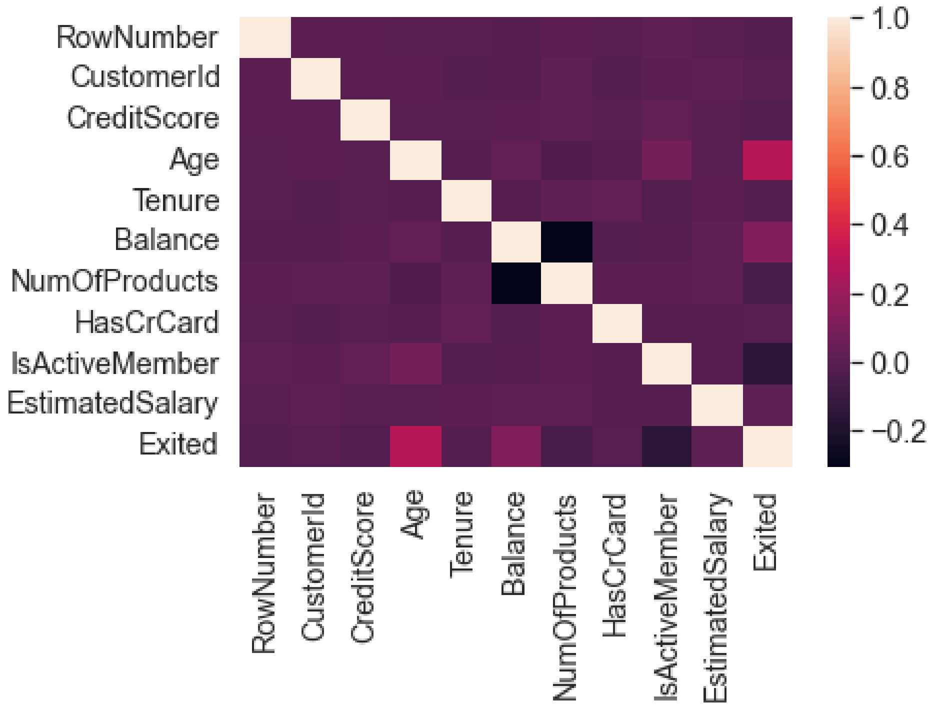
```
#pairplot
sns.pairplot(df);
```

```
In [14]: sns.heatmap(df.corr())
```

```
sns.heatmap(df.corr())
```

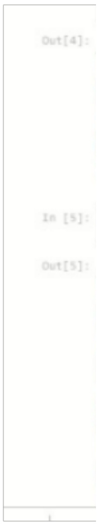
<AxesSubplot>

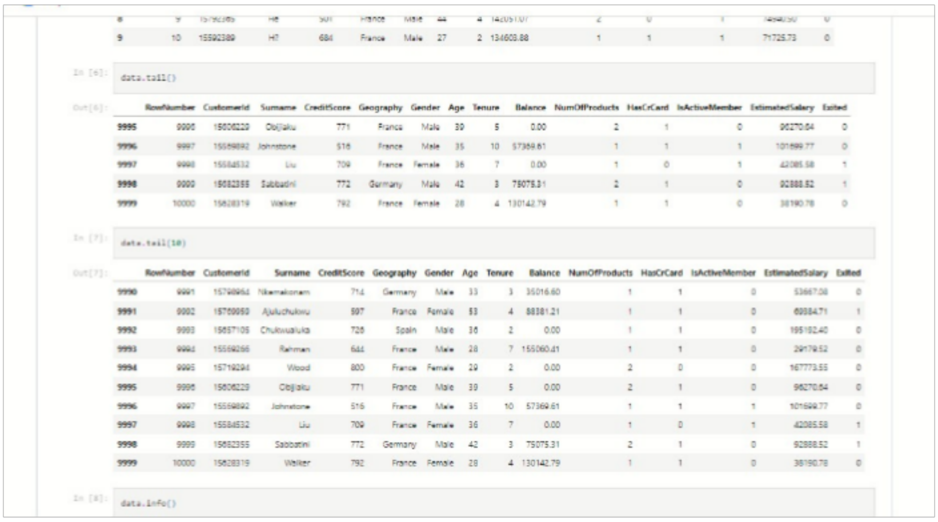
Out[14]:



4. Perform descriptive statistics on the dataset.

```
#load the dataset
import pandas as pd
data=pd.read_csv("model.csv")
data.head()
```





	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
8	9	15792365	He	501	France	Male	44	4	142051.07	2	0	1	74940.50	0
9	10	15592389	H?	684	France	Male	27	2	134603.88	1	1	1	71725.73	0

```
In [6]: data.tail()
```

Out[6]:

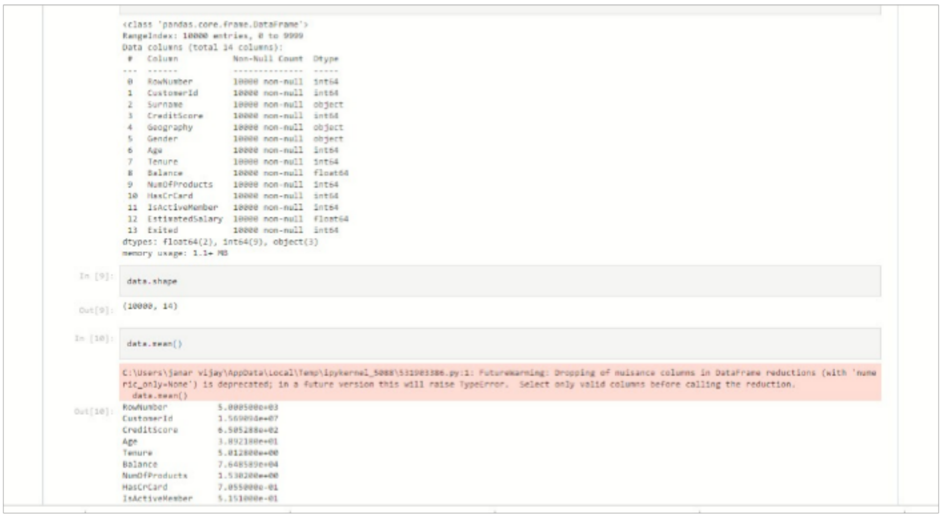
	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
9995	9996	15606229	Obijiaku	771	France	Male	39	5	0.00	2	1	0	96270.64	0
9996	9997	15569892	Johnstone	516	France	Male	35	10	57369.61	1	1	1	101699.77	0
9997	9998	15584532	Liu	709	France	Female	36	7	0.00	1	0	1	42085.58	1
9998	9999	15682355	Sabbatini	772	Germany	Male	42	3	75075.31	2	1	0	92888.52	1
9999	10000	15628319	Walker	792	France	Female	28	4	130142.79	1	1	0	38190.78	0

```
In [7]: data.tail(10)
```

Out[7]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
9990	9991	15798964	Nkemakonam	714	Germany	Male	33	3	35016.60	1	1	0	53667.08	0
9991	9992	15769959	Ajuluchukwu	597	France	Female	53	4	88381.21	1	1	0	69384.71	1
9992	9993	15657105	Chukwualuka	726	Spain	Male	36	2	0.00	1	1	0	195192.40	0
9993	9994	15569266	Rahman	644	France	Male	28	7	155060.41	1	1	0	29179.52	0
9994	9995	15719294	Wood	800	France	Female	29	2	0.00	2	0	0	167773.55	0
9995	9996	15606229	Obijiaku	771	France	Male	39	5	0.00	2	1	0	96270.64	0
9996	9997	15569892	Johnstone	516	France	Male	35	10	57369.61	1	1	1	101699.77	0
9997	9998	15584532	Liu	709	France	Female	36	7	0.00	1	0	1	42085.58	1
9998	9999	15682355	Sabbatini	772	Germany	Male	42	3	75075.31	2	1	0	92888.52	1
9999	10000	15628319	Walker	792	France	Female	28	4	130142.79	1	1	0	38190.78	0

```
In [8]: data.info()
```



```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10000 entries, 0 to 9999
Data columns (total 14 columns):
 #   Column           Non-Null Count  Dtype  
---  ------           --------------  -----  
 0   RowNumber        10000 non-null  int64  
 1   CustomerId       10000 non-null  int64  
 2   Surname          10000 non-null  object 
 3   CreditScore      10000 non-null  int64  
 4   Geography        10000 non-null  object 
 5   Gender           10000 non-null  object 
 6   Age              10000 non-null  int64  
 7   Tenure           10000 non-null  int64  
 8   Balance          10000 non-null  float64
 9   NumOfProducts    10000 non-null  int64  
 10  HasCrCard        10000 non-null  int64  
 11  IsActiveMember   10000 non-null  int64  
 12  EstimatedSalary  10000 non-null  float64
 13  Exited           10000 non-null  int64  
dtypes: float64(2), int64(9), object(3)
memory usage: 1.1+ MB
```

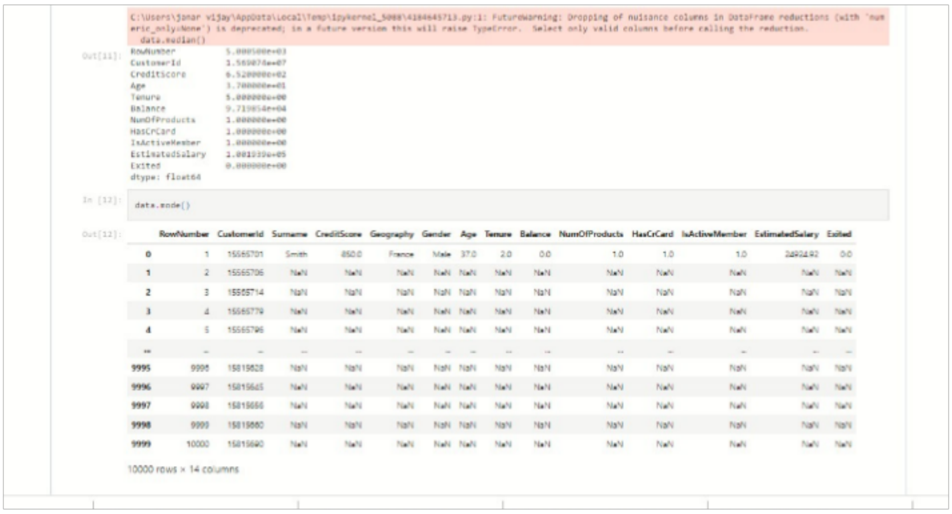
```
In [9]: data.shape
```

```
Out[9]: (10000, 14)
```

```
In [10]: data.mean()
```

```
C:\Users\janar vijay\AppData\Local\Temp\ipykernel_5088\531903386.py:1: FutureWarning: Dropping of nuisance columns in DataFrame reductions (with 'nume
ric_only=None') is deprecated; in a future version this will raise TypeError.  Select only valid columns before calling the reduction.
  data.mean()
```

```
Out[10]: RowNumber          5.000500e+03
CustomerId         1.569094e+07
CreditScore        6.505288e+02
Age                3.892180e+01
Tenure             5.012800e+00
Balance            7.648589e+04
NumOfProducts      1.530200e+00
HasCrCard          7.055000e-01
IsActiveMember     5.151000e-01
```



```
C:\Users\janar vijay\AppData\Local\Temp\ipykernel_5088\4184645713.py:1: FutureWarning: Dropping of nuisance columns in DataFrame reductions (with 'num
eric_only=None') is deprecated; in a future version this will raise TypeError.  Select only valid columns before calling the reduction.
  data.median()
```

```
Out[11]: RowNumber          5.000500e+03
CustomerId         1.569074e+07
CreditScore        6.520000e+02
Age                3.700000e+01
Tenure             5.000000e+00
Balance            9.719854e+04
NumOfProducts      1.000000e+00
HasCrCard          1.000000e+00
IsActiveMember     1.000000e+00
EstimatedSalary    1.001939e+05
Exited             0.000000e+00
dtype: float64
```

```
In [12]: data.mode()
```

Out[12]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
0	1	15565701	Smith	850.0	France	Male	37.0	2.0	0.0	1.0	1.0	1.0	24924.92	0.0
1	2	15565706	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2	3	15565714	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
3	4	15565779	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4	5	15565796	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9995	9996	15815628	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
9996	9997	15815645	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
9997	9998	15815656	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
9998	9999	15815660	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
9999	10000	15815690	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

10000 rows × 14 columns

we ca see the wealthier passengers in the higher classes tend to be older,which makes sense average age

values to impute based on Pclass for Age

In [29]:

```
def impute_age(cols):
    Age=cols[0]
    Pclass=cols[1]

    if pd.isnull(Age):

        if Pclass==1:
            return 37

        elif Pclass ==2:
            return 29

        else:
            return 24
    else:
        return Age
```

Now Apply This Function

In [30]:

```
train['Age'] = train[['Age','Pclass']].apply(impute_age,axis=1)
```

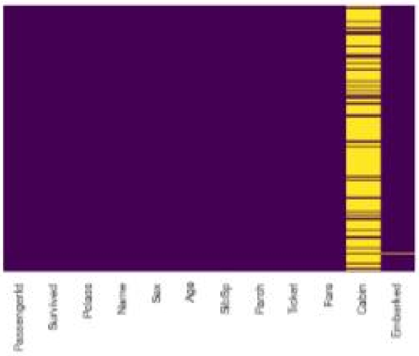
Now let's check Heapmap Again..

In [31]:

```
sns.heatmap(train.isnull(),yticklabels=False,cbar=False,cmap='viridis')
```

Out[31]:

```
<AxesSubplot:>
```



Now The Age Missing Values Can be Handled.

6. Find the outliers and replace the outliers

In [16]:

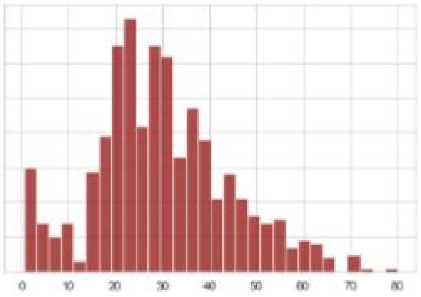
```
#import libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

#load the dataset
df=pd.read_csv('model.csv')
df
```

Out[16]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsA
0	1	15634602	Hargrave	619	France	Female	42	2	0.00	1	1	
1	2	15647311	Hill	608	Spain	Female	41	1	83807.86	1	0	
2	3	15619304	Onio	502	France	Female	42	8	159660.80	3	1	
3	4	15701354	Boni	699	France	Female	39	1	0.00	2	0	
4	5	15737888	Mitchell	850	Spain	Female	43	2	125510.82	1	1	
...	...	...	...	...	...	...	...	...	...	...	...	
9995	9996	15606229	Obijiaku	771	France	Male	39	5	0.00	2	1	
9996	9997	15569892	Johnstone	516	France	Male	35	10	57369.61	1	1	
9997	9998	15584532	Liu	709	France	Female	36	7	0.00	1	0	
9998	9999	15682355	Sabbatini	772	Germany	Male	42	3	75075.31	2	1	
9999	10000	15628319	Walker	792	France	Female	28	4	130142.79	1	1	

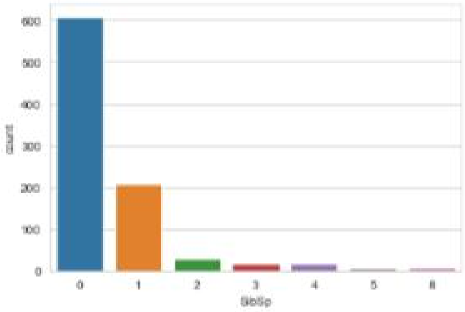
10000 rows × 14 columns

Out[18]: <AxesSubplot:>



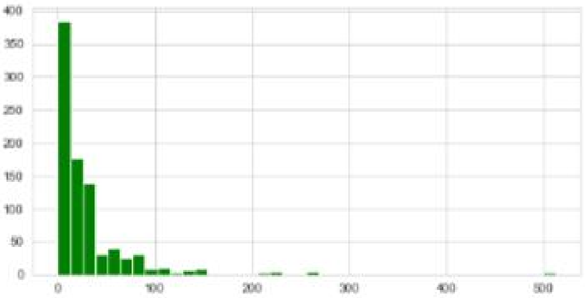
In [19]:
```
sns.countplot(x='SibSp',data=train)
```

Out[19]: <AxesSubplot:xlabel='SibSp', ylabel='count'>



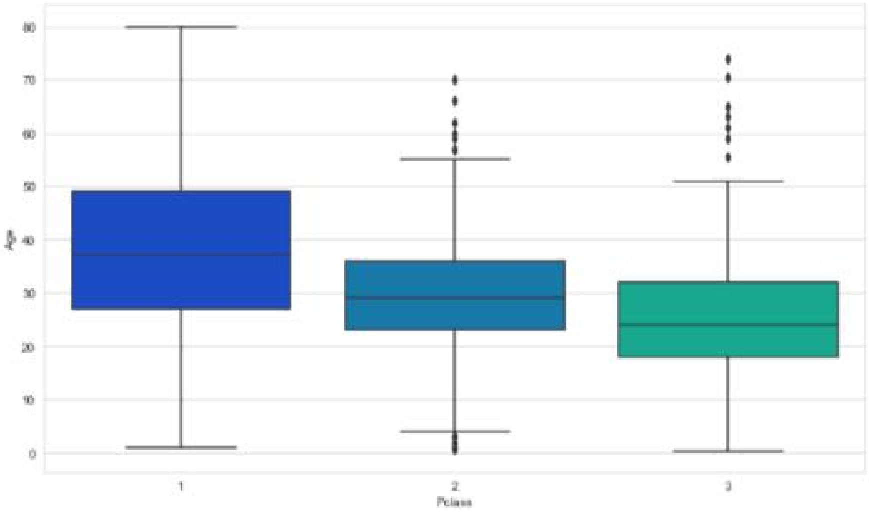
In [20]:
```
train['Fare'].hist(color='green',bins=40,figsize=(8,4))
```

Out[20]: <AxesSubplot:>



In [21]:
```
#Data cleaning
plt.figure(figsize=(12,7))
sns.boxplot(x='Pclass',y='Age',data=train,palette='winter')
```

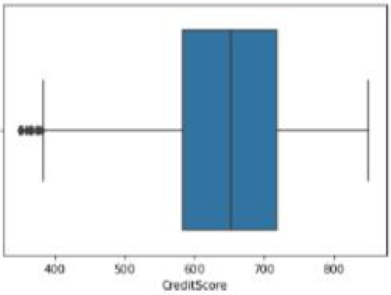
Out[21]: <AxesSubplot:xlabel='Pclass', ylabel='Age'>



```
In [11]: #plotting outliers
         sns.boxplot(df["CreditScore"])
```

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the followi
ng variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data
`, and passing other arguments without an explicit keyword will result in an error or misinterpretati
on.
  warnings.warn(
```

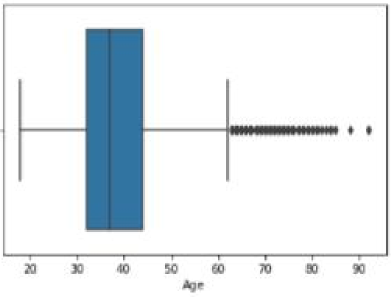
```
Out[11]: <AxesSubplot:xlabel='CreditScore'>
```



```
In [39]: sns.boxplot(df["Age"])
```

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the followi
ng variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data
`, and passing other arguments without an explicit keyword will result in an error or misinterpretati
on.
  warnings.warn(
```

```
Out[39]: <AxesSubplot:xlabel='Age'>
```



```
In [12]: qnt=df.quantile(q=(0.75,0.25))

         qnt
```

Out[12]:

	RowNumber	CustomerId	CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary
0.75	7500.25	15753233.75	718.0	44.0	7.0	127644.24	2.0	1.0	1.0	149388.2475
0.25	2500.75	15628528.25	584.0	32.0	3.0	0.00	1.0	0.0	0.0	51002.1100

```
In [14]: iqr = qnt.loc[0.75]-qnt.loc[0.25] #iqr calculations
         iqr
```

```
Out[14]: RowNumber            4999.5000
         CustomerId         124705.5000
         CreditScore           134.0000
         Age                    12.0000
         Tenure                  4.0000
         Balance            127644.2400
         NumOfProducts           1.0000
         HasCrCard               1.0000
         IsActiveMember          1.0000
         EstimatedSalary     98386.1375
         Exited                  0.0000
         dtype: float64
```

```
In [26]: #lower extreme values
         lower=qnt.loc[0.25] - 1.5*iqr
         lower
```

```
Out[26]: RowNumber         -4.998500e+03
         CustomerId         1.544147e+07
         CreditScore        3.830000e+02
         Age                1.400000e+01
         Tenure            -3.000000e+00
         Balance           -1.914664e+05
         NumOfProducts     -5.000000e-01
         HasCrCard         -1.500000e+00
         IsActiveMember    -1.500000e+00
         EstimatedSalary   -9.657710e+04
         Exited             0.000000e+00
         dtype: float64
```

In [27]:

```
#upper extreme values
upper=qnt.loc[0.75] + 1.5*iqr

upper
```

Out[27]:

```
RowNumber          1.499950e+04
CustomerId         1.594029e+07
CreditScore        9.190000e+02
Age                6.200000e+01
Tenure             1.300000e+01
Balance            3.191106e+05
NumOfProducts      3.500000e+00
HasCrCard          2.500000e+00
IsActiveMember     2.500000e+00
EstimatedSalary    2.969675e+05
Exited             0.000000e+00
dtype: float64
```

In [18]:

```
df.mean()
```

```
C:\Users\janar vijay\AppData\Local\Temp\ipykernel_10016\3698961737.py:1: FutureWarning: Dropping of n
uisance columns in DataFrame reductions (with 'numeric_only=None') is deprecated; in a future version
this will raise TypeError.  Select only valid columns before calling the reduction.
  df.mean()
```

Out[18]:

```
RowNumber          5.000500e+03
CustomerId         1.569094e+07
CreditScore        6.505288e+02
Age                3.892180e+01
Tenure             5.012800e+00
Balance            7.648589e+04
NumOfProducts      1.530200e+00
HasCrCard          7.055000e-01
IsActiveMember     5.151000e-01
EstimatedSalary    1.000902e+05
Exited             2.037000e-01
dtype: float64
```

Replacing outlier

In [45]:

```
#import libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

#load the dataset
df=pd.read_csv('model.csv')
df['CreditScore']=np.where(df['CreditScore']<400,402,df['CreditScore'])
```

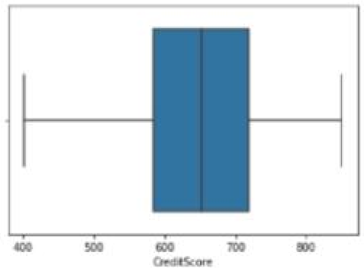
In [49]:

```
#remove outlier on the CreditScore column
sns.boxplot(df["CreditScore"])
```

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the followi
ng variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data
`, and passing other arguments without an explicit keyword will result in an error or misinterpretati
on.
  warnings.warn(
```

Out[49]:

```
<AxesSubplot:xlabel='CreditScore'>
```



In [50]:

```
#remove outlier on the Age column
df['Age']=np.where(df['Age']>60,50,df['Age'])
```

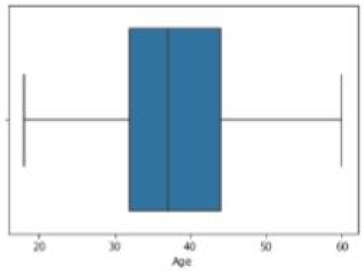
In [51]:

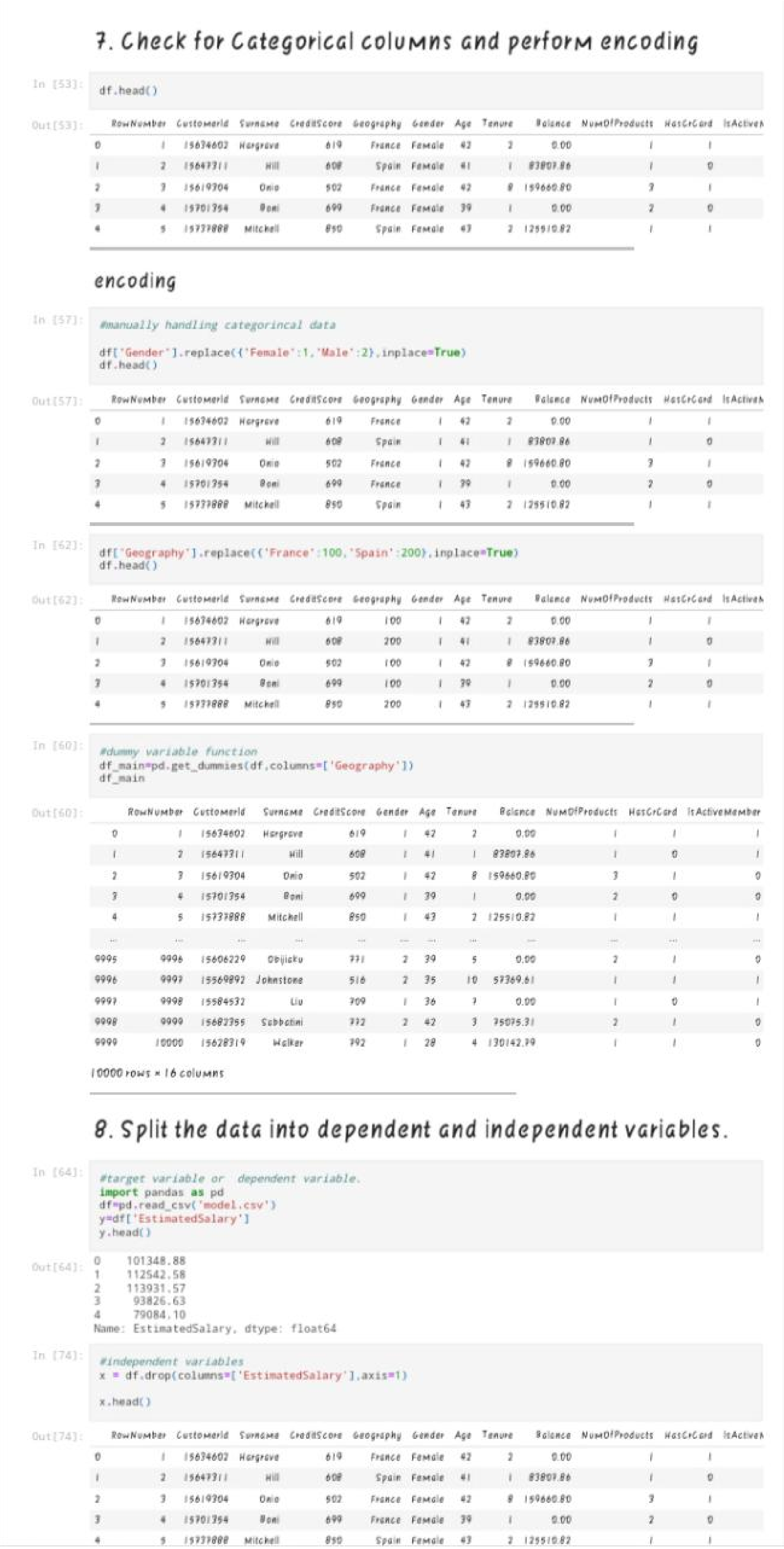
```
sns.boxplot(df["Age"])
```

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the followi
ng variable as a keyword arg: x. From version 0.12, the only valid positional argument will be `data
`, and passing other arguments without an explicit keyword will result in an error or misinterpretati
on.
  warnings.warn(
```

Out[51]:

```
<AxesSubplot:xlabel='Age'>
```





7. Check for Categorical columns and perform encoding

In [53]:

```
df.head()
```

Out[53]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveM
0	1	15634602	Hargrave	619	France	Female	42	2	0.00	1	1	
1	2	15647311	Hill	608	Spain	Female	41	1	83807.86	1	0	
2	3	15619304	Onio	502	France	Female	42	8	159660.80	3	1	
3	4	15701354	Boni	699	France	Female	39	1	0.00	2	0	
4	5	15737888	Mitchell	850	Spain	Female	43	2	125510.82	1	1	

encoding

In [57]:

```
#manually handling categorincal data
df['Gender'].replace({'Female':1,'Male':2},inplace=True)
df.head()
```

Out[57]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveM
0	1	15634602	Hargrave	619	France	1	42	2	0.00	1	1	
1	2	15647311	Hill	608	Spain	1	41	1	83807.86	1	0	
2	3	15619304	Onio	502	France	1	42	8	159660.80	3	1	
3	4	15701354	Boni	699	France	1	39	1	0.00	2	0	
4	5	15737888	Mitchell	850	Spain	1	43	2	125510.82	1	1	

In [62]:

```
df['Geography'].replace({'France':100,'Spain':200},inplace=True)
df.head()
```

Out[62]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveM
0	1	15634602	Hargrave	619	100	1	42	2	0.00	1	1	
1	2	15647311	Hill	608	200	1	41	1	83807.86	1	0	
2	3	15619304	Onio	502	100	1	42	8	159660.80	3	1	
3	4	15701354	Boni	699	100	1	39	1	0.00	2	0	
4	5	15737888	Mitchell	850	200	1	43	2	125510.82	1	1	

In [60]:

```
#dummy variable function
df_main=pd.get_dummies(df,columns=['Geography'])
df_main
```

Out[60]:

	RowNumber	CustomerId	Surname	CreditScore	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember
0	1	15634602	Hargrave	619	1	42	2	0.00	1	1	1
1	2	15647311	Hill	608	1	41	1	83807.86	1	0	1
2	3	15619304	Onio	502	1	42	8	159660.80	3	1	0
3	4	15701354	Boni	699	1	39	1	0.00	2	0	0
4	5	15737888	Mitchell	850	1	43	2	125510.82	1	1	1
...	...	...	...	...	...	...	...	...	...	...	...
9995	9996	15606229	Obijiaku	771	2	39	5	0.00	2	1	0
9996	9997	15569892	Johnstone	516	2	35	10	57369.61	1	1	1
9997	9998	15584532	Liu	709	1	36	7	0.00	1	0	1
9998	9999	15682355	Sabbatini	772	2	42	3	75075.31	2	1	0
9999	10000	15628319	Walker	792	1	28	4	130142.79	1	1	0

10000 rows × 16 columns

8. Split the data into dependent and independent variables.

In [64]:

```
#target variable or  dependent variable.
import pandas as pd
df=pd.read_csv('model.csv')
y=df['EstimatedSalary']
y.head()
```

Out[64]:

```
0    101348.88
1    112542.58
2    113931.57
3     93826.63
4     79084.10
Name: EstimatedSalary, dtype: float64
```

In [74]:

```
#independent variables
x = df.drop(columns=['EstimatedSalary'],axis=1)

x.head()
```

Out[74]:

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveM
0	1	15634602	Hargrave	619	France	Female	42	2	0.00	1	1	
1	2	15647311	Hill	608	Spain	Female	41	1	83807.86	1	0	
2	3	15619304	Onio	502	France	Female	42	8	159660.80	3	1	
3	4	15701354	Boni	699	France	Female	39	1	0.00	2	0	
4	5	15737888	Mitchell	850	Spain	Female	43	2	125510.82	1	1	