This dataset is all about transction amount by credicard of Indian people.

In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:
```
df=pd.read_csv("Credit card transactions - India - Simple.csv")
```

In [3]:
```
df.head()
```

Out[3]:

	index	City	Date	Card Type	Exp Type	Gender	Amount
0	0	Delhi, India	29-Oct-14	Gold	Bills	F	82475
1	1	Greater Mumbai, India	22-Aug-14	Platinum	Bills	F	32555
2	2	Bengaluru, India	27-Aug-14	Silver	Bills	F	101738
3	3	Greater Mumbai, India	12-Apr-14	Signature	Bills	F	123424
4	4	Bengaluru, India	5-May-15	Gold	Bills	F	171574

In [4]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 26052 entries, 0 to 26051
Data columns (total 7 columns):
 #   Column      Non-Null Count  Dtype 
---  ------      --------------  ----- 
 0   index       26052 non-null  int64 
 1   City        26052 non-null  object
 2   Date        26052 non-null  object
 3   Card Type   26052 non-null  object
 4   Exp Type    26052 non-null  object
 5   Gender      26052 non-null  object
 6   Amount      26052 non-null  int64 
dtypes: int64(2), object(5)
memory usage: 1.4+ MB
```

In the data set there are 26052 records and 7 columns are available

In [5]:
```
df['Card Type'].value_counts()
```

Out[5]:
```
Silver       6840
Signature    6447
Platinum     6398
Gold         6367
Name: Card Type, dtype: int64
```

silver,signature,platinum,gold these four types of cards are in dataset and count of each card is getting by value counts

In [6]:
```
df['Exp Type'].value_counts()
```

Out[6]:
```
Food             5463
Fuel             5257
Bills            5078
Entertainment    4762
Grocery          4754
Travel            738
Name: Exp Type, dtype: int64
```

People expend on food,fuel,entertainment,grocery and travel.There are minimum people who expends on travel.

In [7]:
```
df['City'].value_counts()
```

Out[7]:
```
Bengaluru, India          3552
Greater Mumbai, India     3493
Ahmedabad, India          3491
Delhi, India              3482
Hyderabad, India           784
                          ...
Rayagada, India              1
Varanasi, India              1
Hugli-Chinsurah, India       1
Alirajpur, India             1
Fazilka, India               1
Name: City, Length: 986, dtype: int64
```

There are 986 cities in the dataset.

In [8]:
```
# how many people uses gold card  as credit card
len(df[df['Card Type']=='Gold'])
```

Out[8]:
```
6367
```

average expenditure on entertainment

In [9]:
```
df[df['Exp Type']=='Entertainment']['Amount'].mean()
```

Out[9]:
```
152548.83158336833
```

average expenditure on Travel

In [10]:
```
df[df['Exp Type']=='Travel']['Amount'].mean()
```

Out[10]:
```
148042.83333333334
```

how many people belongs to benguluru city and expend on food.

In [11]:
```
len(df[(df['City']=='Bengaluru, India') & (df['Exp Type']=='Food')])
```

Out[11]:
```
805
```

average Transction amount by female only

In [12]:
```
df[df['Gender']=="F"]['Amount'].mean()
```

Out[12]:
```
161206.9466374269
```

average transction amount by male only

In [13]:
```
df[df['Gender']=="M"]['Amount'].mean()
```

Out[13]:
```
151109.14508567733
```

which 5 cities most uses Credit cards

In [14]:
```
df['City'].value_counts().head()
```

Out[14]:
```
Bengaluru, India          3552
Greater Mumbai, India     3493
Ahmedabad, India          3491
Delhi, India              3482
Hyderabad, India           784
Name: City, dtype: int64
```

what is average transction by gold card

In [15]:
```
df[df['Card Type']=='Gold']['Amount'].mean()
```

Out[15]:
```
154631.62179990576
```

How many people that are transcted in 2014 by creditcard

In [16]:
```
def fun():
    count=0
    for i in df['Date']:
        if i.split('-')[-1]=='14':
            count+=1
    print(count)
fun()
```

```
15791
```

In [ ]:
```

```