Product Sales Analysis

PHASE-4

Introduction:

In this section continue building the project by performing different activities like feature engineering, model training, evolution etc.. as per the instruction in the project..

PROGRAM:

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

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

Out[3]:

OUTPUT:

Out[3]:

	Product_name	Product_id	Product_Category	price	Professional_Publication	Region_address
0	"chambre a coucher "	"40008817"	"Meubles et décoration "	1 800	"private"	"Grand Casablanca"
1	"Comte free fire"	"40008816"	"Jeux vidéo et consoles "		"private"	"Grand Casablanca"
2	"Iphone 6 plus"	"40008815"	"Téléphones "		"private"	"Grand Casablanca"
3	"Renault "	"40008814"	"Voitures "		"private"	"Chaouia-Ouardigha"
4	"PS3 SLIM 360 GB "	"40008812"	"Jeux vidéo et consoles "	1 400	"private"	"Rabat-Salé-Zemmour-Zaër"

In [5]:
```
df.isna().sum()
```

Out[5]:
```
Product_name                0
Product_id                  0
Product_Category            0
price                     770
Professional_Publication    0
Region_address              0
Local_address               0
dtype: int64
```

SECURITY:

SECURITY IS ALWAYS A CONCERN WHEN IT COMES TO RUNNING A BUSINESS ONLINE. WHILE SHOPPING ONLINE, CUSTOMERS OFTEN WONDER WHETHER PERSONAL INFORMATION WOULD BE SAFE ENOUGH WHILE BEING SENT OVER THE INTERNET. WHAT IF A HACKER STEALS CREDIT CARD NUMBERS OR BANK DETAILS? ARE THEY REALLY PROTECTED FROM MALICIOUS APPS AND WEBSITES?

PROGRAM:

```
*?)"$')
df['Local_address'] = df['Local_address'].str.extract(r'^"(?P<Product>.
*?)"$')

# Replacing all empty string values with NAN
df = df.replace(r'^\s*$', np.nan, regex=True)

# Replacing the strings
df['Product_name'] = df['Product_name'].apply(lambda x: np.nan if str(x).fi
nd('?')>-1 else x)

df['price'] = df['price'].str.replace(' ', '')
```

In [7]:

```
# Dropping all the NaN values, this will drop 1.456 incompleted records.
df.dropna(inplace=True)

# Setting the correct data types
df['price'] = pd.to_numeric(df['price'], errors='coerce')
```

CONCLUSION:

Security measures on e-Commerce websites are essential to keep customers safe. These include things like encryption, anti-phishing tools, password management, fraud detection systems, and more.

Websites should ensure that only authorized users can access sensitive information. A good way to protect against unauthorized access is by using SSL encryption technology. Not only this, clearly communicate your privacy policy and obtain permission before storing data about customers.