

TASK 7

Get Basic Sales Summary from a Tiny SQLite Database using Python

PYTHON SCRIPT :

To connect sales dataset :

- Create a file and save it as create.py
- Then run the following code :

```
import pandas as pd
import sqlite3
df = pd.read_csv("gaurav.csv")
conn = sqlite3.connect("gaurav.db")
df.to_sql("sales", conn, if_exists="replace", index=False)
conn.close()
print("Database created successfully.")
```

Database created Successfully :

```
PS C:\Users\HP_PC\Documents\VS code\Python> python -u "c:\Users\HP_PC\Documents\VS code\Python\gaurav_create.py"
Database created successfully.
PS C:\Users\HP_PC\Documents\VS code\Python>
```

SQL Queries :

```
import sqlite3

import pandas as pd

import matplotlib.pyplot as plt

conn = sqlite3.connect("Gaurav.db")

query = """

SELECT item AS product,

       SUM(quantity) AS total_qty,

       SUM(total_amount) AS revenue

FROM sales

GROUP BY item
```

```
"""
```

```
df = pd.read_sql_query(query, conn)
conn.close()
print("Sales Summary by Product:")
print(df)
plt.figure(figsize=(10, 6))
df.plot(kind='bar', x='product', y='revenue', legend=False, color='aqua')
plt.title('Revenue by Product')
plt.xlabel('Product')
plt.ylabel('Revenue')
plt.xticks(rotation=45)
plt.tight_layout()
plt.savefig("sales_chart.png")
plt.show()
```

```
PS C:\Users\HP PC\Documents\VS code\Python> python -u "c:\Users\HP PC\Documents\VS code\Python\gaurav.py"
Sales Summary by Product:
   product  total_qty  revenue
0      Bag         10   389.40
1  Chocolate         26  2689.32
2  Headphones         18  1540.41
3      Jeans         27  2376.44
4      Juice         43  3799.87
5  Notebook         23  1556.42
6       Pen         42  5011.56
7     Shoes         26  2857.89
8  Smartphone         20  1603.48
9       Soda         15  1573.83
10    T-shirt         24  2412.97
11    Watch         11  1138.44
PS C:\Users\HP PC\Documents\VS code\Python>
```

