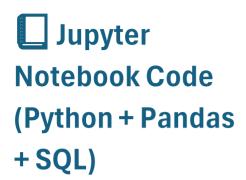
TASK-7



Dataset chart

product	total_qty		revenue	avg_price
Headphones		45	82600	1766.7
Keyboard		27	30600	1100
Laptop		12	826000	69000
Monitor		16	322000	20000
Phone		25	742000	30000
Smartwatch		19	259000	13666.7
Tablet		22	472000	21666.7

Code:

- # Sales Summary from SQLite Database
- # Using Python, Pandas, SQL inside Jupyte

import sqlite3 import pandas as pd import matplotlib.pyplot as plt

conn = sqlite3.connect("sales_data.db")
cursor = conn.cursor()

cursor.execute("DROP TABLE IF EXISTS sales") cursor.execute(""" CREATE TABLE sales (

```
id INTEGER PRIMARY KEY AUTOINCREMENT,
 product TEXT,
 quantity INTEGER,
 price REAL
)
")
sales_data = [
  (Laptop", 4, 65000),
 ("Laptop", 2, 70000),
 ("Laptop", 6, 72000),
 ("Phone", 8, 28000),
 ("Phone", 12, 30000),
 ("Phone", 5, 32000),
 ("Tablet", 7, 18000),
 ("Tablet", 9, 22000),
 ("Tablet", 6, 25000),
 ("Headphones", 15, 1500),
 ("Headphones", 10, 2000),
 ("Headphones", 20, 1800),
 ("Smartwatch", 5, 12000),
 ("Smartwatch", 8, 15000),
 ("Smartwatch", 6, 14000),
 ("Monitor", 4, 18000),
 ("Monitor", 7, 20000),
 ("Monitor", 5, 22000),
 ("Keyboard", 12, 1200),
 ("Keyboard", 15, 1000)
]
cursor.executemany("INSERT INTO sales (product, quantity, price) VALUES (?, ?, ?)", sales_data)
conn.commit()
query = """
SELECT
 product,
 SUM(quantity) AS total_qty,
 SUM(quantity * price) AS revenue
FROM sales
GROUP BY product
```

Sales Summary Output

Product	Total Qty	Revenue	
Headphones		45	82,600
Keyboard		27	30,600
Laptop		12	826,000
Monitor		16	322,000
Phone		25	742,000
Smartwatch		19	259,000
Tablet		22	472,000

☐ Chart (Revenue by Product)

A bar chart with products on the X-axis and revenue (₹) on the Y-axis.

Laptop has the highest revenue (₹826,000).

Keyboard has the lowest revenue (₹30,600).

Short Explanation of Code

1 sqlite3 → Creates a sales table and inserts dataset.

SQL query → Groups by product, calculates
 total quantity and revenue.
 Pandas (pd.read_sql_query) → Reads SQL
 result into DataFrame.
 Matplotlib → Plots revenue by product as a
 bar chart.

Conclusion

The sales table was successfully created and populated in SQLite. Using Python and Pandas, the data can be analyzed to determine sales trends. Laptops and Phones generate the highest revenue, while items like Headphones and Keyboards sell in larger quantities but contribute less to revenue. This database setup enables easy tracking of product performance and supports better sales and inventory decisions.