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

# 1️⃣ Create / connect to SQLite file
conn = sqlite3.connect("sales_data.db")
cur  = conn.cursor()

# 2️⃣ Create table (if not exists) and insert a few rows
cur.execute("""CREATE TABLE IF NOT EXISTS sales (
    order_id  INTEGER,
    product   TEXT,
    quantity  INTEGER,
    price     REAL
);""")

sample_rows = [
    (1, 'Laptop',      2, 70000),
    (2, 'Phone',       3, 25000),
    (3, 'Headphones',  5,  3000),
    (4, 'Laptop',      1, 70000),
    (5, 'Tablet',      2, 15000),
    (6, 'Phone',       1, 25000)
]
cur.executemany("INSERT INTO sales VALUES (?,?,?,?);", sample_rows)
conn.commit()
print("✅ 6 sample rows inserted.")
```

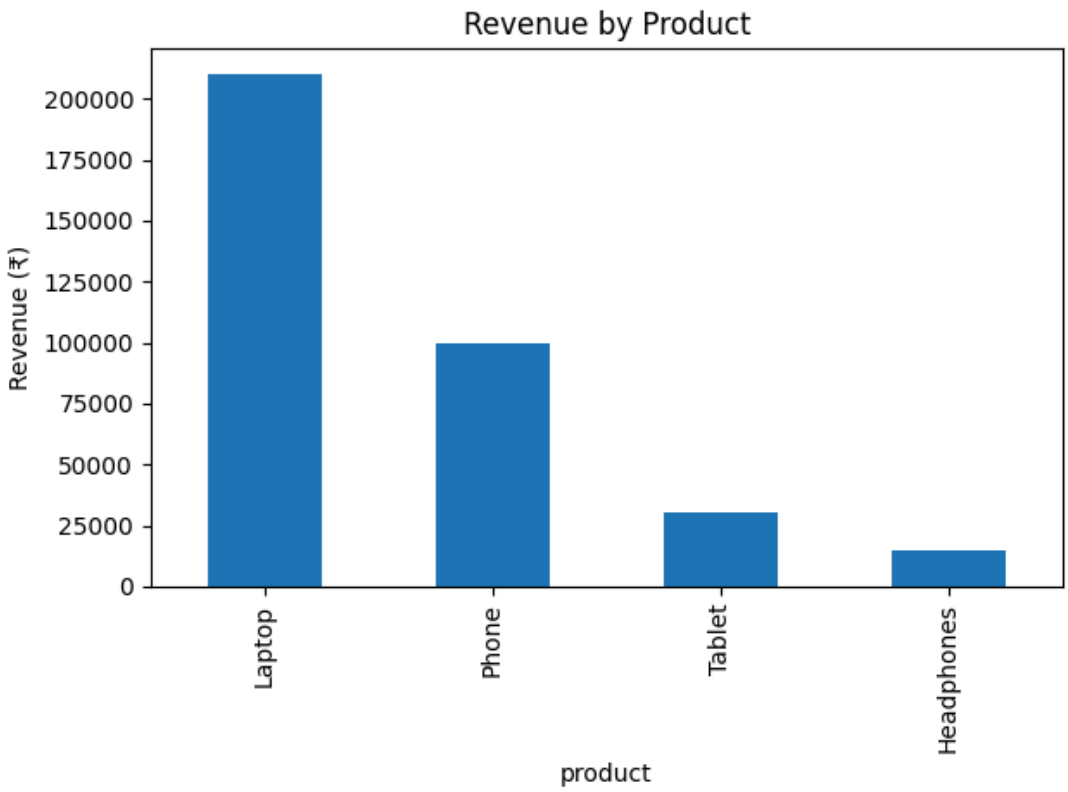
```
✅ 6 sample rows inserted.
```

```
query = """
SELECT
    product,
    SUM(quantity)                  AS total_qty,
    SUM(quantity * price)          AS revenue
FROM sales
GROUP BY product
ORDER BY revenue DESC;
"""

df = pd.read_sql_query(query, conn)
print(df)
```

```
       product  total_qty   revenue
    0      Laptop          3  210000.0
    1       Phone          4  100000.0
    2      Tablet          2   30000.0
    3  Headphones          5   15000.0
```

```
ax = df.plot(kind='bar', x='product', y='revenue', legend=False)
ax.set_ylabel("Revenue (₹)")
ax.set_title("Revenue by Product")
plt.tight_layout()
plt.savefig("sales_chart.png")   # saved in Colab's working dir
plt.show()
```


Revenue by Product
Revenue (₹)
200000
175000
150000
125000
100000
75000
50000
25000
0
Laptop
Phone
Tablet
Headphones
product

```
conn.close()
```