jupyter Untitled Last Checkpoint: 58 seconds ago

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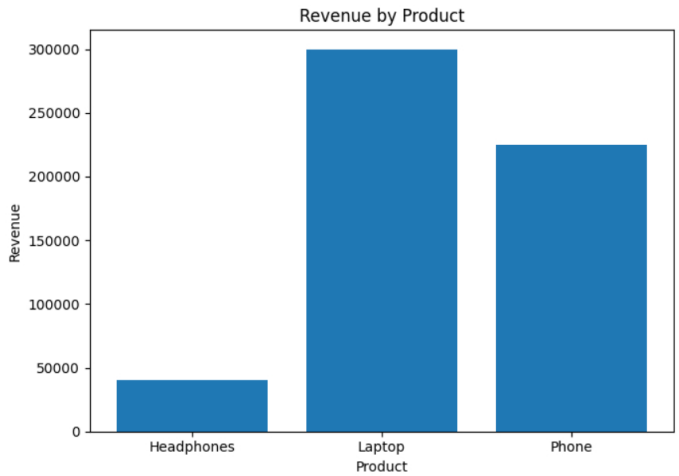
Code

JupyterLab Python 3 (ipykernel)

[2]:
```
import sqlite3
import pandas as pd
import matplotlib.pyplot as plt

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

cursor.execute("""
CREATE TABLE IF NOT EXISTS sales (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    product TEXT,
    quantity INTEGER,
    price REAL
)
""")

sample_data = [
    ("Laptop", 4, 50000),
    ("Laptop", 2, 50000),
    ("Phone", 10, 15000),
    ("Phone", 5, 15000),
    ("Headphones", 15, 2000),
    ("Headphones", 5, 2000)
]

cursor.execute("DELETE FROM sales")     # Clean previous data
cursor.executemany("INSERT INTO sales (product, quantity, price) VALUES (?, ?, ?)", sample_data)
conn.commit()

print("Database & sample data created successfully!\n")


query = """
SELECT
    product,
    SUM(quantity) AS total_quantity,
    SUM(quantity * price) AS revenue
FROM sales
GROUP BY product
"""

df = pd.read_sql_query(query, conn)
print("Sales Summary:\n")
print(df)
print("\n")


plt.figure(figsize=(7,5))
plt.bar(df['product'], df['revenue'])
plt.xlabel("Product")
plt.ylabel("Revenue")
plt.title("Revenue by Product")
plt.tight_layout()
plt.savefig("sales_chart.png")
plt.show()

print("Chart saved as sales_chart.png")
```

```
Database & sample data created successfully!

Sales Summary:

      product  total_quantity   revenue
0  Headphones              20   40000.0
1      Laptop               6  300000.0
2       Phone              15  225000.0
```




```
Chart saved as sales_chart.png
```

[ ]: