

```
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 = [
    ("Apple", 10, 0.5),
    ("Banana", 5, 0.2),
    ("Apple", 8, 0.5),
    ("Orange", 15, 0.3),
    ("Banana", 12, 0.2),
    ("Orange", 10, 0.3),
    ("Grapes", 7, 0.8)
]


cursor.executemany("INSERT INTO sales (product, quantity, price) VALUES (?, ?, ?)", sample_data)

conn.commit()


query = """
SELECT product,
    SUM(quantity) AS total_qty,
    SUM(quantity * price) AS revenue
```

```
FROM sales
```

```
GROUP BY product
```

```
"""
```

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

```
print("Sales Summary:")
```

```
print(df)
```

```
df.plot(kind='bar', x='product', y='revenue', legend=False)
```

```
plt.title("Revenue by Product")
```

```
plt.ylabel("Revenue")
```

```
plt.xlabel("Product")
```

```
plt.tight_layout()
```

```
plt.show()
```

```
conn.close()
```

Sales Summary:

	product	total_qty	revenue
0	Apple	18	9.0
1	Banana	17	3.4
2	Grapes	7	5.6
3	Orange	25	7.5

