

```
In [60]: import sqlite3
conn = sqlite3.connect("sales_data.db")
cursor = conn.cursor()
```

```
In [61]: cursor.execute("""
CREATE TABLE IF NOT EXISTS sales (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    product TEXT,
    quantity INTEGER,
    price REAL
)
""")
```

Out[61]: <sqlite3.Cursor at 0x24ddacf0140>

```
In [62]: cursor.executemany("""
INSERT INTO sales (product, quantity, price)
VALUES (?, ?, ?)
""", [
    ("Apples", 10, 2.5),
    ("Bananas", 20, 1.2),
    ("Oranges", 15, 1.8),
    ("Apples", 5, 2.5),
    ("Bananas", 7, 1.2)
])
```

Out[62]: <sqlite3.Cursor at 0x24ddacf0140>

```
In [64]: conn.commit()
```

```
In [65]: cursor.execute("SELECT * FROM sales")
print(cursor.fetchall())
```

```
[(1, 'Apples', 10, 2.5), (2, 'Bananas', 20, 1.2), (3, 'Oranges', 15, 1.8), (4, 'Apples', 5, 2.5), (5, 'Bananas', 7, 1.2)]
```

```
In [68]: import sqlite3
conn = sqlite3.connect("sales_data.db")
```

```
In [70]: query = """
SELECT
    product,
    SUM(quantity) AS total_qty,
    SUM(quantity * price) AS revenue
FROM sales
GROUP BY product;
"""
```

```
In [71]: import pandas as pd
df = pd.read_sql_query(query, conn)
print(df)
```

	product	total_qty	revenue
0	Apples	15	37.5
1	Bananas	27	32.4
2	Oranges	15	27.0

```
In [73]: import matplotlib.pyplot as plt
df.plot(kind='bar', x='product', y='revenue', legend=False)
plt.ylabel("Revenue")
plt.title("Revenue per Product")
plt.show()
```

