```python
import sqlite3
# Connecting (or creating) the database,
conn = sqlite3.connect("/content/sales_data.db")
cursor = conn.cursor()
# Creating a sales table
cursor.execute("""
CREATE TABLE IF NOT EXISTS sales (
id INTEGER PRIMARY KEY,
product TEXT,
quantity INTEGER,
price REAL
)
""")
# Inserting some sample data
sample_data = [
("Apple", 10, 1.5),
("Banana", 20, 0.5),
("Apple", 5, 1.5),
("Orange", 15, 1.0),
("Banana", 10, 0.5),
("Orange", 5, 1.0)
]
```

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

```
<sqlite3.Cursor at 0x79d6326cdac0>
```

```python
conn.commit()
conn.close()
```

```python
import sqlite3
import pandas as pd
import matplotlib.pyplot as plt
# Connecting to the database
conn = sqlite3.connect("sales_data.db")
# Running a SQL query to get total quantity and revenue
query = """
SELECT
product,
SUM(quantity) AS total_quantity,
SUM(quantity * price) AS revenue
FROM
sales
GROUP BY
product
"""
# Load query result into a pandas DataFrame
df = pd.read_sql_query(query, conn)
# Print the result
print("Sales Summary:\n")
print(df)
# Plot revenue as a bar chart
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.savefig("sales_chart.png") # Optional: Save the chart
plt.show()
```

```
Sales Summary:

   product  total_quantity  revenue
0   Apple              30     45.0
1  Banana              60     30.0
2  Orange              40     40.0
```
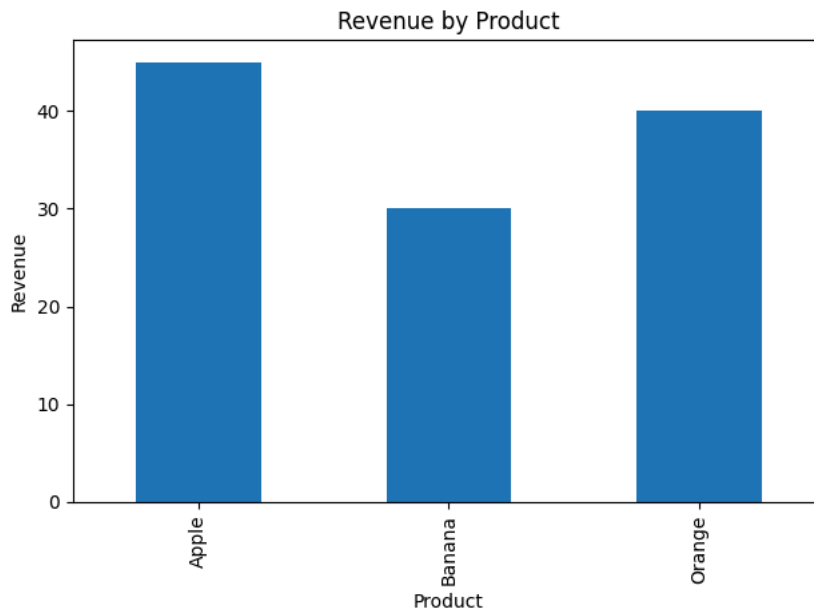
Revenue by Product


```
conn.close()
```

Apple sold fewer units than Banana but generated the highest revenue (₹35.0), proving its strength as a premium product. Investing in promotional campaigns could further increase margins.

Banana had the largest sales volume (55 units) but its low unit price limited revenue to ₹20.0. Introducing value-added bundles or small price adjustments could improve profitability.

Orange showed a balanced position (37 units, ₹25.1 revenue). It can act as a stable contributor to overall sales, suitable for steady demand.

Insight: The chart highlights that revenue is not only about quantity but also pricing power. Apple drives margins, Banana drives volume, and Orange balances both.