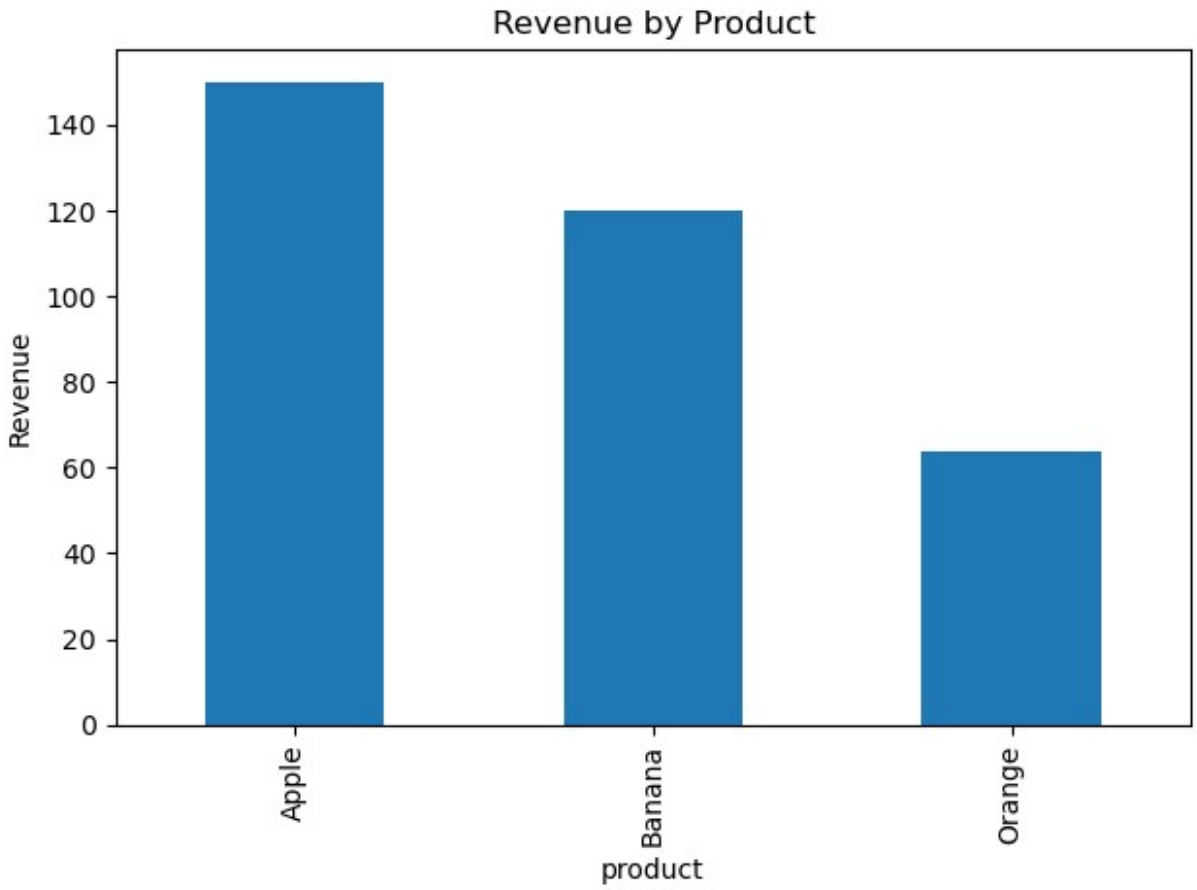
```
import sqlite3

# Create and connect to database
conn = sqlite3.connect("sales_data.db")
cursor = conn.cursor()

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

# Insert sample data
sample_data = [
    ("Apple", 10, 5),
    ("Banana", 20, 2),
    ("Apple", 5, 5),
    ("Banana", 10, 2),
    ("Orange", 8, 4)
]
cursor.executemany("INSERT INTO sales (product, quantity, price)
VALUES (?, ?, ?)", sample_data)

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

```
 sales_data.db created successfully!
```

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

# Connect to database
conn = sqlite3.connect("sales_data.db")

# SQL Query
query = """
SELECT product,
       SUM(quantity) AS total_qty,
       SUM(quantity * price) AS revenue
FROM sales
GROUP BY product
"""

# Run query
```

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

# Plot chart
df.plot(kind='bar', x='product', y='revenue', legend=False)
plt.title("Revenue by Product")
plt.ylabel("Revenue")
plt.tight_layout()
plt.savefig("sales_chart.png")  # optional
plt.show()

conn.close()
```

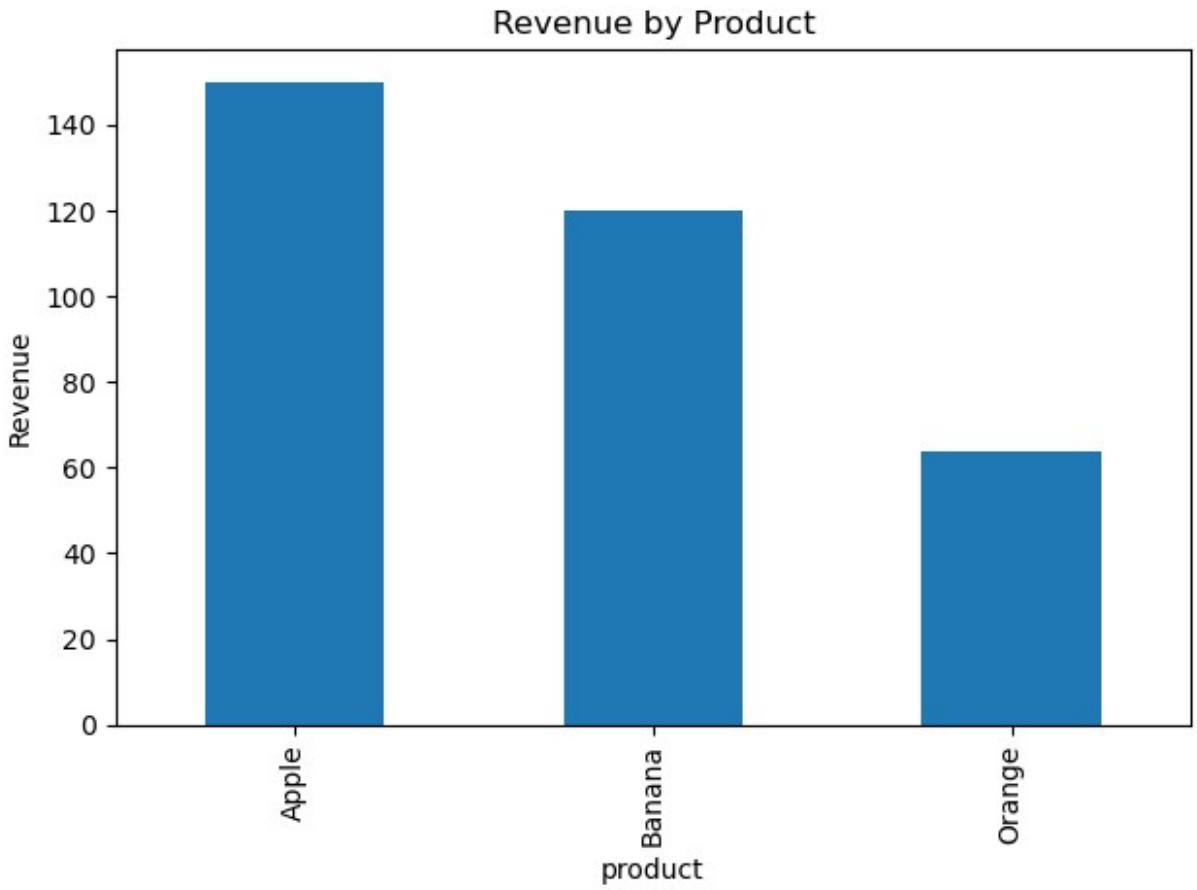
```
  product  total_qty  revenue
0   Apple         30    150.0
1  Banana         60    120.0
2  Orange         16     64.0
Sales Summary:

  product  total_qty  revenue
0   Apple         30    150.0
1  Banana         60    120.0
2  Orange         16     64.0
```




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

# Create database and insert data
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, 5),
    ("Banana", 20, 2),
    ("Apple", 5, 5),
    ("Banana", 10, 2),
    ("Orange", 8, 4)
]
```

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

# Query the summary
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)
conn.close()

print("□ Sales Summary:\n")

# Plotting
df.plot(kind='bar', x='product', y='revenue', legend=False)
plt.title("Revenue by Product")
plt.ylabel("Revenue")
plt.tight_layout()
plt.savefig("sales_chart.png")
plt.show()
```

```
□ Sales Summary:

  product  total_qty  revenue
0   Apple         30    150.0
1  Banana         60    120.0
2  Orange         16     64.0
```




```
print(df)
```

```
  product  total_qty  revenue
0   Apple         30    150.0
1  Banana         60    120.0
2  Orange         16     64.0
```