

In [7]: **import** sqlite3

```
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
)
""")

sales_data = [
    ("Apple", 10, 2.5),
    ("Banana", 20, 1.0),
    ("Apple", 5, 2.5),
    ("Orange", 15, 1.8),
    ("Banana", 10, 1.0),
    ("Orange", 10, 1.8),
    ("Grapes", 25, 2.2),
    ("Mango", 12, 3.0),
    ("Pineapple", 8, 4.5),
    ("Mango", 6, 3.0),
    ("Apple", 7, 2.5),
    ("Banana", 18, 1.0),
    ("Grapes", 10, 2.2),
    ("Orange", 5, 1.8),
    ("Pineapple", 4, 4.5),
    ("Grapes", 15, 2.2),
    ("Mango", 10, 3.0),
    ("Apple", 3, 2.5),
    ("Banana", 25, 1.0),
    ("Orange", 12, 1.8),
    ("Watermelon", 9, 5.0),
    ("Papaya", 6, 2.8),
    ("Papaya", 10, 2.8)
]

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

conn.commit()
conn.close()

print("Database created with 20+ rows.")
```

Database created with 20+ rows.

In [8]: **import** sqlite3
import pandas **as** pd
import matplotlib.pyplot **as** plt

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

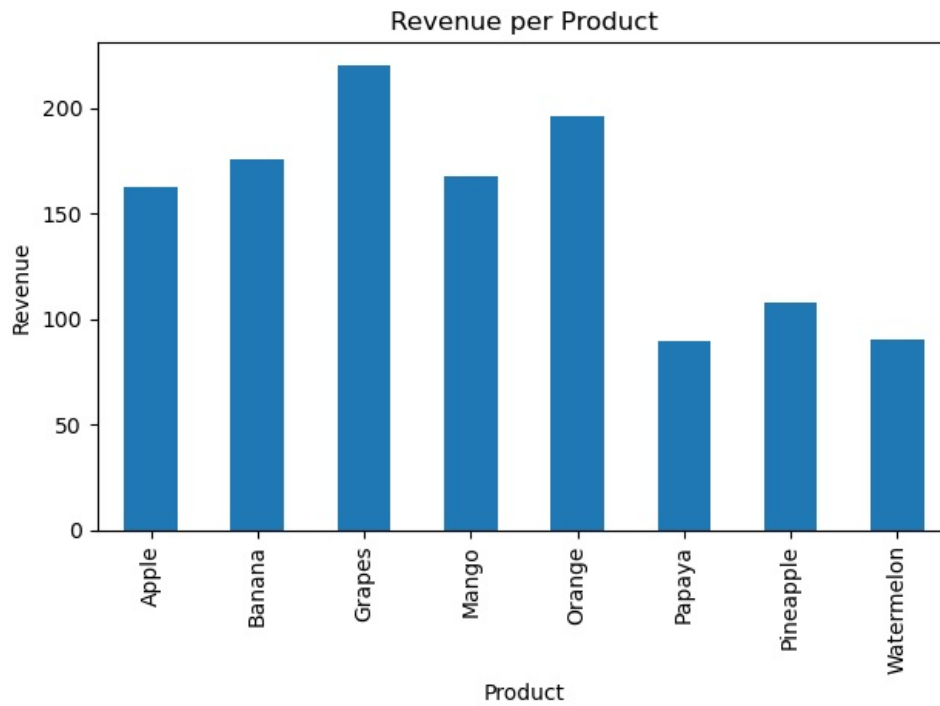
query = """
SELECT product,
        SUM(quantity) AS total_qty,
        SUM(quantity * price) AS revenue
FROM sales
GROUP BY product
"""
df = pd.read_sql_query(query, conn)

conn.close()

print(df)
```

	product	total_qty	revenue
0	Apple	65	162.5
1	Banana	176	176.0
2	Grapes	100	220.0
3	Mango	56	168.0
4	Orange	109	196.2
5	Papaya	32	89.6
6	Pineapple	24	108.0
7	Watermelon	18	90.0

```
In [9]: df.plot(kind='bar', x='product', y='revenue', legend=False)
plt.title("Revenue per Product")
plt.ylabel("Revenue")
plt.xlabel("Product")
plt.tight_layout()
plt.savefig("sales_chart.png") # Optional: saves the chart
plt.show()
```



In []:

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js