
□ Scenario – Sales Data Visualization

Step 1: Prepare the Dataset

```
import pandas as pd

# Create sales dataset
data = {
    "Month": ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct",
              "Nov", "Dec"],
    "Revenue": [12000, 15000, 17000, 14000, 18000, 22000, 24000, 20000, 23000, 25000,
                27000, 30000],
    "Profit": [3000, 3500, 4000, 3200, 4500, 6000, 6500, 5800, 6200, 7000, 7500,
              8000],
    "Region": ["North", "South", "East", "West", "North", "South", "East", "West",
               "North", "South", "East", "West"]
}

df = pd.DataFrame(data)
print(df.head())
```

Step 2: Exercises (Visualization Tasks)

1. Line Chart

- Plot **Revenue over Months**.
- Add labels and title.

2. Bar Chart

- Plot **Profit for each Month**.
- Use different colors.

3. Grouped Bar Chart

- Compare **Revenue vs Profit per Month**.

4. Pie Chart

- Show **total Revenue contribution by Region**.

5. Scatter Plot

- Plot **Revenue vs Profit** to check correlation.

6. Histogram

- Show the distribution of **Revenue** values.

7. Box Plot

- Visualize **Profit across Regions**.
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