Classroom Assignment <2>: Defect Trend Analysis with Matplotlib

Learning Objective:

Learn how to create a **line chart** using Matplotlib to visualize defect trends over time.

Expected Completion Time:

Best Case: 20 minutes
Average Case: 25 minutes

Assignment Details:

Create a Python script named **matplotlib_defect_trends.py** that:

1. Stores the number of defects logged each week in a project:

```
Weeks = [1, 2, 3, 4, 5, 6]
Defects = [5, 8, 6, 10, 7, 4]
```

4. Plot a **line chart** with Weeks on the X-axis and Defects on the Y-axis.
5. Add chart title: `"Defect Trend Over Time"`
6. Add axis labels:
    a. X-axis → `"Week Number"`
    b. Y-axis → `"Number of Defects"`
7. Add markers on the line to highlight each data point.
8. Display the chart.

Hints to Solve:

- Use `plt.plot(x, y, marker='o')`.
- Use `plt.grid(True)` to show a grid.
- Use `plt.show()` to display.

Expected Outcome:

- A **line chart** showing how defects are increasing/decreasing over the weeks.