

Practice Exercise
Programming for Data Science

07.08.2025

Students are informed to try Matplotlib Graphs for the dataset recorded from any realtime event:

Sample scenario for temperature and rainfall recorded for the last 5 days:

1. Line Chart – Temperature Trend

- Plot a line chart showing temperature variation across the five days.
- Add markers and grid lines for better readability.
- Label axes and give the chart a meaningful title.

2. Scatter Plot – Specific Day Comparison

- Choose any two days (e.g., Wednesday and Friday).
- Plot their temperature values using a scatter plot.
- Highlight the points with distinct colors and sizes.

3. Bar Chart – Daily Temperatures

- Create a bar chart to represent temperature values for each day.
- Use color to differentiate the bars.
- Add axis labels and a title.

4. Average Temperature Calculation

- Compute the average temperature over the five days.
- Display the result in the console.
- Optionally, annotate the average on the line chart.

5. Pie Chart – each day contrition for 5 days

- Find each day rainfall contribution towards total rainfall recorded in 5 days