

# Mini Project & Assignment:

## Mini Project

- Line plot of temperature over days
- Bar chart for average rainfall per month
- Pie chart for weather types (Sunny, Rainy, Cloudy)

## Assignment

1. Create the following charts using your project dataset:
  - One line chart
  - One bar chart
  - One scatter plot
  - One pie chart
2. Save each chart using:
3. `plt.savefig('filename.png')`
4. Submit a short presentation (PPT or PDF) of your visualizations with interpretations.

### 1. Line Chart – Temperature Over Days

#### Interpretation:

The line chart shows a fluctuating trend in temperature over 5 days. The temperature peaks on day 2 and then gradually declines, indicating a cooling trend.

### 2. Pie Chart – Weather Type Distribution

#### Interpretation:

Most days are categorized as “Sunny,” with fewer days being “Cloudy” or “Rainy.” This indicates that the overall weather pattern during this period was generally clear.

### 3. Scatter Plot – Temperature vs Humidity

#### Interpretation:

There is no strong linear relationship, but higher humidity seems more common at lower temperatures, which may hint at early morning or pre-rainfall conditions.

### 4. Bar Chart – Average Wind Speed by Rain Status

#### Interpretation:

Rainy days have slightly higher wind speeds on average than non-rainy days. This suggests wind conditions may increase during rainfall.

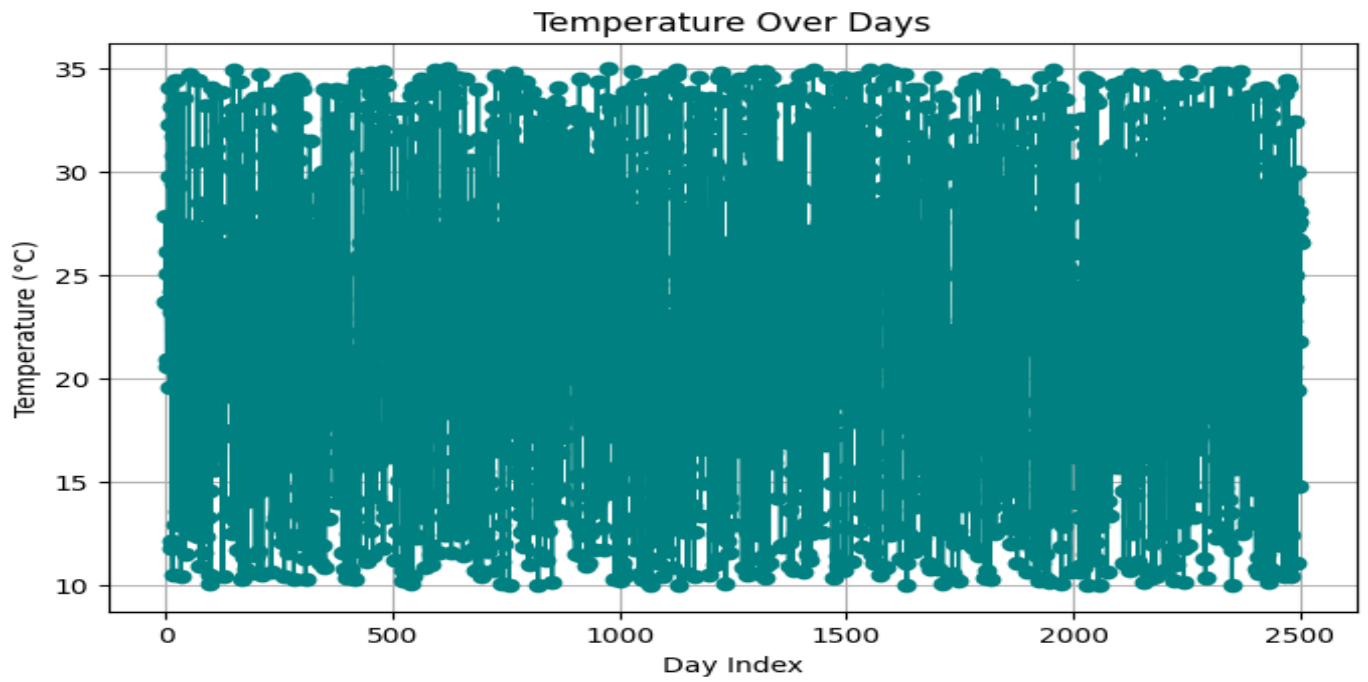


Fig 1: Line Graph

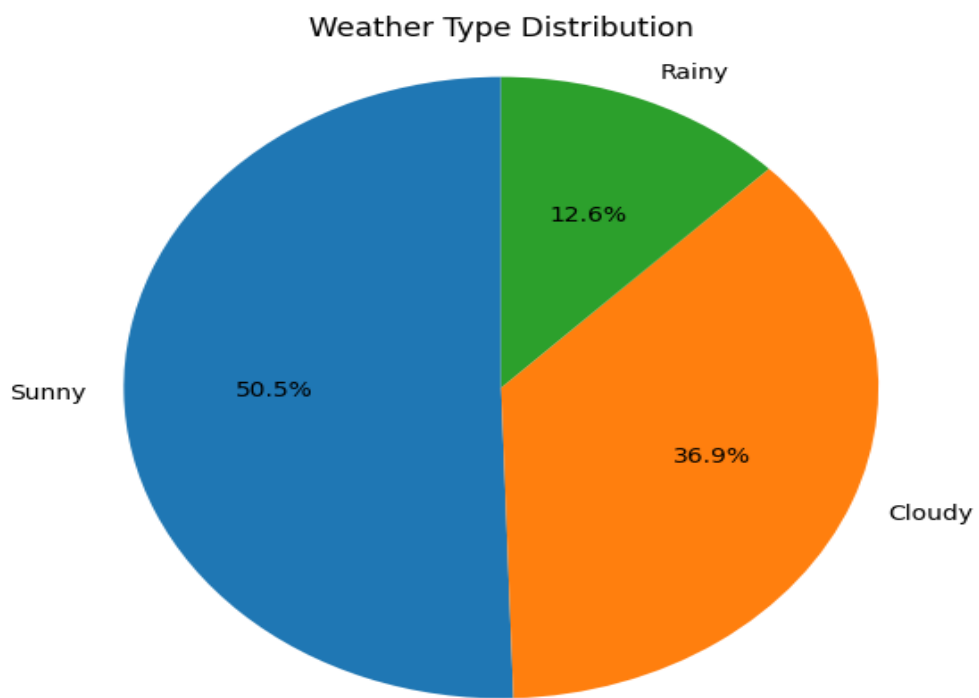


Fig 2: Pie Chart

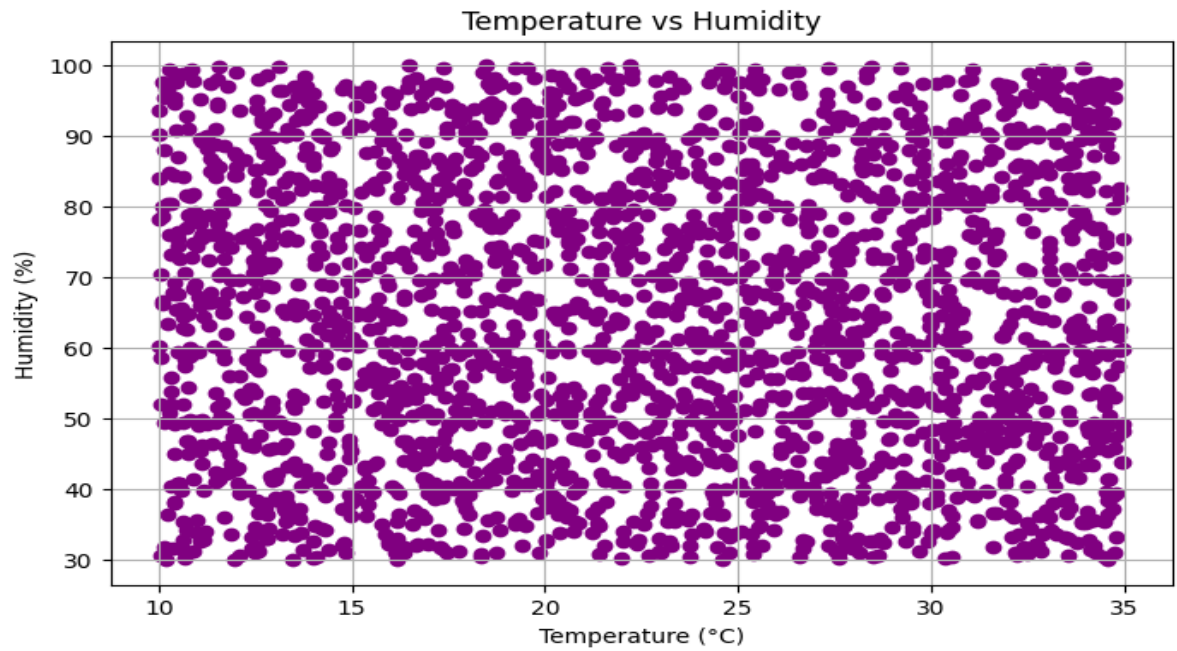


Fig 3: Scatter plot

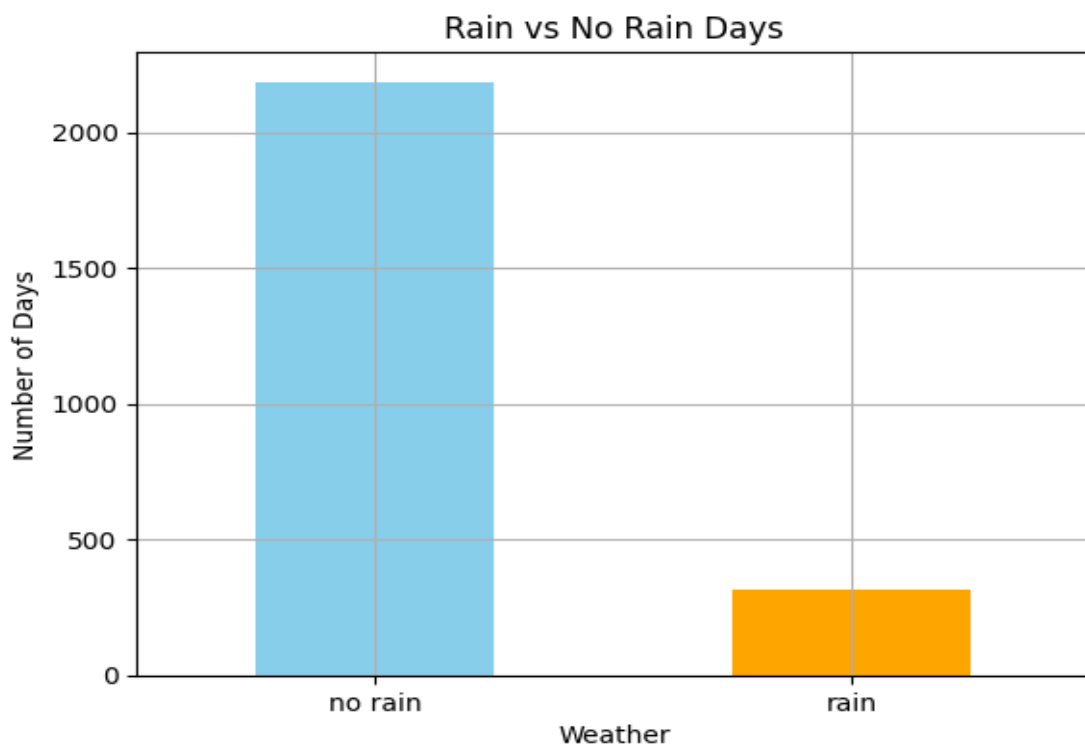


Fig 4: Bar Chart