Project - 1

Project Title: Weather Data Analysis (Entry Level)

Objective: Conduct basic data analytics and visualization on the Weather Data Set to gain insights. No machine learning is required for this entry-level project, and tools such as PowerBI, Tableau, or any preferred tool can be used for analysis and visualization.

Tasks:

1. Descriptive Statistics:
   - Compute and present basic statistics (mean, median, standard deviation) for MinTemp, MaxTemp, Rainfall, and Evaporation.

2. Time Series Visualization:
   - Create a line chart to show the variations in weather variables over time, identifying trends or patterns.

3. Correlation Analysis:
   - Calculate and visualize correlations between MinTemp, MaxTemp, Rainfall, and Evaporation using a heatmap.

4. Rainfall Distribution:
   - Illustrate the distribution of rainfall through a histogram or kernel density plot, highlighting common levels and outliers.

5. Seasonal Analysis:
   - Analyze average values of weather variables across different seasons and visualize seasonal patterns with bar graphs.

Submission Instructions:

1. Follow all the instructions mentioned in the attached Instruction PDF.
2. Zip the entire project file, including all necessary documents and assets.
3. Submit the zipped file through Google Classroom.
4. Include the GitHub repository link in the submission.

Important Dates:

- Last Date for Submission: January 10, 2024
- Coding Contest: January 11, 2024
- Certifications: Certificates will be provided to top performers in the coding contest.

We encourage you to approach this project with enthusiasm and creativity.

Important Note: This project aims to provide a foundational understanding of the workforce through basic analytics and visualization. It does not involve complex coding or machine learning techniques. Utilize your preferred tool to create visually appealing and insightful representations of the employee data set.