**Intern Task Brief: Rainfall Data Analysis Using SQL**

**Batch:** May 2025  
**Role:** Data Analyst Intern  
**Organization:** SoulVibe.Tech

**Dataset Overview**

You will be working with a dataset that contains district-level rainfall data across all Indian states and union territories. The dataset includes:

* Monthly rainfall (JAN to DEC)
* Seasonal aggregates: Jan–Feb, Mar–May, Jun–Sep, Oct–Dec
* Total annual rainfall

**Objective**

Use SQL to explore, analyze, and derive insights from the rainfall data.

**Task Instructions**

1. **Load the Data:**
   * Import the dataset into a SQL-supported environment (MySQL, PostgreSQL, SQLite, etc.).
   * Ensure all column names are clean and correctly formatted.
   * Suggested table name: rainfall\_data.
2. **Write & Execute Queries:**
   * Complete all **20 intermediate-level SQL queries** provided (BELOW).
   * Save each query and its output (screenshot format).
3. **Documentation:**
   * Create a .docx or .pdf file containing:
     + Each query (with query number and description).
     + Corresponding results/output (can be screenshots or copied tables).
     + A brief explanation of what each query does (2–3 lines).
4. **Submission Format:**
   * Filename: YourName\_SQL\_RainfallTask.pdf
   * Submit via the internship Google Form or assigned portal by **[Insert Deadline Date]**.

**🛠️ Tools You Can Use:**

* MySQL Workbench, PostgreSQL, SQLite Browser

**✅ Evaluation Criteria:**

* Accuracy of SQL logic and syntax
* Clear formatting and structured documentation
* Insightful interpretation (if explanation is added)
* Timely submission

**📩 Need Help?**

For doubts, reach out to:  
📧 **soulvibe.tech@gmail.com**  
   
**SQL QUERIES:**

#### Total annual rainfall per state (descending order):

1. Top 5 rainiest districts in India (based on ANNUAL):
2. Average rainfall in each season by state:
3. Find districts with more than 3000 mm annual rainfall:
4. State-wise district count:
5. State with the highest average annual rainfall:
6. Districts where July rainfall exceeds 600 mm:
7. Compare June vs July rainfall for each district:
8. Districts with the lowest rainfall in October:
9. Top 5 driest districts (lowest ANNUAL rainfall):
10. Districts where Jan-Feb rainfall is greater than Oct-Dec:
11. State-wise average monthly rainfall for March:
12. Districts where August rainfall is less than May:
13. Total rainfall in monsoon season (Jun–Sep) for all India:
14. Districts with rainfall below 100 mm in all 4 winter months (Nov–Feb):
15. Rank districts within each state by ANNUAL rainfall:
16. Districts where total Mar–May rainfall exceeds Jan–Feb:
17. States with more than 5 districts having over 2500 mm rainfall:
18. Districts where May is the wettest month:
19. Average rainfall in all districts of Arunachal Pradesh: