**Relational Database Project (SEQUEL) Project**

**Water Access and Sanitation in Africa: A Case Study**

The primary goal of this case study is to analyze data, identify patterns, and propose informed, data-driven recommendations that governments and stakeholders can implement to effectively improve water access and sanitation in African communities.

**Data Overview**

**Please upload the dataset to your SQL environment.**

**Link to dataset:** Water Access and Sanitation CaseStudy Datasets

1. **Water Availability and Population Distribution** This dataset provides insights into the availability of water resources in relation to community populations.

2. **Water Source Type and Functionality** This dataset explores the distribution of different water sources (borehole, well, river) and their operational status (functional vs. non-functional water points).

3. **Sanitation Infrastructure and Maintenance** This dataset examines the type of sanitation facilities available (toilets vs. latrines) and their associated annual maintenance costs.

4. **Support from Governments and NGOs** This dataset assesses the level of governmental and NGO intervention in water and sanitation projects across different communities.

5. **Health and Community Well-being** This dataset analyzes the correlation between water access, sanitation conditions, and waterborne disease incidence rates.

6. **Community Satisfaction and Accessibility** This dataset provides insights into the satisfaction levels of communities based on water access, sanitation quality, and distance to the nearest water source.

**Key Business Questions**

1. Write an SQL query to calculate the average water availability (liters per capita per day) for each country.

2. Write an SQL query to retrieve details of communities where at least one water point is non-functional.

3. Please retrieve the information for the top five communities with the highest annual sanitation maintenance costs.

4. Calculate the total number of functional and non-functional water points per country

5. Identify communities with a high incidence of waterborne diseases (>20%)

6. Find the average distance to the water source per region

7. List the communities that receive both government and NGO support

8. Identify the community with the highest population per country