ANS

SQL table syntax

CREATE TABLE Hospital\_Data (

hospital name VARCHAR(100),

location VARCHAR(100),

department VARCHAR(100),

doctors count INT,

patients count INT,

admission date DATE,

discharge date DATE,

medical expenses DECIMAL(10, 2)

);

Select \* from Hospital\_Data;

1. **Total Number of Patients**

* Write an SQL query to find the total number of patients across all hospitals.

**ANS: SELECT SUM("Patients Count") AS total\_patients**

**FROM Hospital\_Data;**

1. **Average Number of Doctors per Hospital**

* Retrieve the average count of doctors available in each hospital.

**ANS: SELECT AVG(doctors\_per\_hospital) AS avg\_doctors**

**FROM (**

**SELECT "Hospital Name", AVG("Doctors Count") AS doctors\_per\_hospital**

**FROM Hospital\_Data**

**GROUP BY "Hospital Name"**

**) AS sub;**

1. **Top 3 Departments with the Highest Number of Patients**

* Find the top 3 hospital departments that have the highest number of patients.

**ANS: SELECT Department, SUM("Patients Count") AS total\_patients**

**FROM Hospital\_Data**

**GROUP BY Department**

**ORDER BY total\_patients DESC**

**LIMIT 3;**

1. **Hospital with the Maximum Medical Expenses**

* Identify the hospital that recorded the highest medical expenses.

**ANS: SELECT "Hospital Name", "Medical Expenses"**

**FROM Hospital\_Data**

**ORDER BY "Medical Expenses" DESC**

**LIMIT 1;**

1. **Daily Average Medical Expenses**

* Calculate the average medical expenses per day for each hospital.

**ANS: SELECT**

**"Hospital Name",**

**AVG("Medical Expenses" / NULLIF(DATEDIFF(DAY, "Admission Date", "Discharge Date"), 0)) AS avg\_daily\_expense**

**FROM Hospital\_Data**

**GROUP BY "Hospital Name";**

1. **Longest Hospital Stay**

* Find the patient with the longest stay by calculating the difference between Discharge Date and Admission Date.

**ANS: SELECT**

**"Hospital Name",**

**"Admission Date",**

**"Discharge Date",**

**DATEDIFF(DAY, "Admission Date", "Discharge Date") AS stay\_length**

**FROM Hospital\_Data**

**ORDER BY stay\_length DESC**

**LIMIT 1;**

1. **Total Patients Treated Per City**

* Count the total number of patients treated in each city.

**ANS:** **SELECT Location, SUM("Patients Count") AS total\_patients**

**FROM Hospital\_Data**

**GROUP BY Location;**

1. **Average Length of Stay Per Department**

* Calculate the average number of days patients spend in each department.

**ANS:** **SELECT**

**Department,**

**AVG(DATEDIFF(DAY, "Admission Date", "Discharge Date")) AS avg\_stay**

**FROM Hospital\_Data**

**GROUP BY Department;**

1. **Identify the Department with the Lowest Number of Patients**

* Find the department with the least number of patients.

**ANS:** **SELECT Department, SUM("Patients Count") AS total\_patients**

**FROM Hospital\_Data**

**GROUP BY Department**

**ORDER BY total\_patients ASC**

**LIMIT 1;**

1. **Monthly Medical Expenses Report**

• Group the data by month and calculate the total medical expenses for each month.

**ANS: SELECT**

**FORMAT("Admission Date", 'yyyy-MM') AS month,**

**SUM("Medical Expenses") AS total\_expenses**

**FROM Hospital\_Data**

**GROUP BY FORMAT("Admission Date", 'yyyy-MM')**

**ORDER BY month;**