

Assignment (Hospital data)

```
CREATE TABLE hospital (  
    Hospitalname VARCHAR(100),  
    location VARCHAR(100),  
    department VARCHAR(100),  
    doctorscount INT,  
    patientscount INT,  
    admissiondate DATE,  
    dischargedate DATE,  
    medicalexpenses VARCHAR(100)  
);
```

-- Q1. Total Number of Patients

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

```
SELECT SUM(patientscount) AS Total_Patient  
FROM hospital;
```

-- Q2. Average Number of Doctors per Hospital

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

```
SELECT hospitalname,AVG(doctorscount) AS Avg_Doctor  
FROM hospital  
GROUP BY hospitalname;
```

-- Q3.Top 3 Departments with the Highest Number of Patients

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

```
SELECT department,MAX(patientscount) AS Highest_patient  
FROM hospital
```

GROUP BY department

ORDER BY Highest_patient DESC LIMIT 3;

--Q4. Hospital with the Maximum Medical Expenses

-- Identify the hospital that recorded the highest medical expenses.

SELECT hospitalname, MAX(medicalexpenses) AS Max_medicalExp

FROM hospital

GROUP BY hospitalname;

-- Q5.Daily Average Medical Expenses

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

SELECT hospitalname, admissiondate, ROUND(AVG(CAST(medicalexpenses AS
NUMERIC)),2) AS Avg_Exp

FROM hospital

GROUP BY hospitalname, admissiondate;

-- Q6. Longest Hospital Stay

**-- Find the patient with the longest stay by calculating the difference
between**

-- Discharge Date and Admission Date.

SELECT patientscount, MAX(dischargedate-admissiondate) AS Stay_days

FROM hospital

GROUP BY patientscount

ORDER BY Stay_days DESC LIMIT 1;

-- Q7. Total Patients Treated Per City

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

```
SELECT location,SUM(patientscount) AS Total_patients
FROM hospital
GROUP BY location
ORDER BY Total_patients DESC ;
```

-- Q8.Average Length of Stay Per Department

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

```
SELECT department,ROUND(AVG(dischargedate-admissiondate),2) AS
Avg_spend_days
FROM hospital
GROUP BY department;
```

-- Q9.Identify the Department with the Lowest Number of Patients

-- Find the department with the least number of patients.

```
SELECT department, SUM(patientscount) AS Total_patient
FROM hospital
GROUP BY department
ORDER BY Total_patient ASC LIMIT 1;
```

-- Q10. Monthly Medical Expenses Report

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

```
SELECT
    EXTRACT(MONTH FROM admissiondate) AS month_num,
    TO_CHAR(admissiondate, 'Month') AS month_name,
    SUM(CAST(medicalexpenses AS NUMERIC)) AS total_medical_expenses
FROM hospital
```

GROUP BY month_num, month_name

ORDER BY month_num;