

```
DROP TABLE IF EXISTS hospital;
```

```
CREATE TABLE hospital (  
    HospitalName VARCHAR(100),  
    Location VARCHAR(100),  
    Department VARCHAR(100),  
    DoctorsCount INT,  
    PatientsCount INT,  
    AdmissionDate DATE,  
    DischargeDate DATE,  
    MedicalExpenses DECIMAL(10,2)  
);
```

```
SELECT * FROM hospital;
```

```
INSERT INTO hospital VALUES
```

```
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( 'City Hospital', 'Lucknow', 'Cardiology', 32, 67, '2023-11-18', '2023-11-24', 36748.42),
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('Metro Hospital', 'Chennai', 'Urology', 28, 154, '2023-09-04', '2023-09-19', 23012.64);

SELECT \* FROM hospital;

--1. Total Number of Patients

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

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

--2. Average Number of Doctors per Hospital

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

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

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

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

```
SELECT department, patientscount  
FROM hospital  
ORDER BY patientscount DESC  
LIMIT 3;
```

--4. Hospital with the Maximum Medical Expenses

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

```
SELECT hospitalname, location, department, medicalexpenses  
FROM hospital  
ORDER BY medicalexpenses DESC  
LIMIT 1;
```

--5. Daily Average Medical Expenses

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

```
SELECT
    hospitalname,
    AVG(medicalexpenditures / NULLIF((dischargedate - admissiondate), 0)) AS daily_average_expenses
FROM
    hospital
GROUP BY
    hospitalname;
```

--6. Longest Hospital Stay

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

--Discharge Date and Admission Date.

```
SELECT hospitalname, location, department, admissiondate, dischargedate,
    (dischargedate - admissiondate) AS stay_length
FROM hospital
ORDER BY stay_length DESC
LIMIT 1;
```

--7. Total Patients Treated Per City

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

```
SELECT location, SUM(patientscount) AS total_patients
FROM hospital
GROUP BY location;
```

--8. Average Length of Stay Per Department

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

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

--9. Identify the Department with the Lowest Number of Patients

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

```
SELECT department, patientscount
```

```
FROM hospital
```

```
ORDER BY patientscount
```

```
LIMIT 1;
```

--10. Monthly Medical Expenses Report

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

```
SELECT
```

```
    TO_CHAR(admissiondate, 'YYYY-MM') AS month,
```

```
    SUM(medicalexpenses) AS total_medical_expenses
```

```
FROM hospital
```

```
GROUP BY TO_CHAR(admissiondate, 'YYYY-MM')
```

```
ORDER BY month;
```

