

****SQL Assignment****

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

```
SELECT SUM (patients_count) AS total_number_of_patients FROM hospital_data;
```

Retrieve the average count of doctors available in each hospital?

```
SELECT AVG (doctors_count) AS avg_of_doctors FROM hospital_data;
```

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

```
SELECT hospital_name, department, patients_count  
FROM hospital_data ORDER BY patients_count DESC LIMIT 3;
```

Identify the hospital that recorded the highest medical expenses?

```
SELECT hospital_name, medical_expenses FROM hospital_data  
ORDER BY medical_expenses DESC LIMIT 1;
```

Calculate the average medical expenses per day for each hospital?

```
SELECT hospital_name, ROUND (SUM (medical_expenses) / SUM (discharge_date - admission_date + 1), 2)  
AS avg_daily_expenses FROM hospital_data GROUP BY hospital_name ORDER BY avg_daily_expenses DESC;
```

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

```
SELECT hospital_name, patients_count, admission_date, discharge_date,  
age (discharge_date, admission_date) AS stay_duration FROM hospital_data  
ORDER BY stay_duration DESC LIMIT 1;
```

Count the total number of patients treated in each city?

```
SELECT location, SUM (patients_count) AS total_patients  
FROM hospital_data group by location;
```

Calculate the average number of days patients spend in each department?

```
SELECT department, ROUND (AVG (discharge_date - admission_date + 1), 2)  
AS avg_stay_days, COUNT (*) AS total_patients FROM hospital_data  
GROUP BY department ORDER BY avg_stay_days DESC;
```

Identify the Department with the Lowest Number of Patients?

```
SELECT department, COUNT (patients_count) AS patient_count FROM hospital_data  
GROUP BY department ORDER BY patient_count ASC LIMIT 1;
```

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

```
SELECT TO_CHAR (Admission_Date, 'YYYY-MM') AS month, SUM(medical_expenses) AS  
total_medical_expenses FROM hospital_data GROUP BY TO_CHAR (admission_date, 'YYYY-MM') ORDER BY  
month;
```