

30 Days SQL Micro Course Assignment Answers:

1. Total Number of Patients

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

#Sol.

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

2. Average Number of Doctors per Hospital

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

#Sol.

```
SELECT SUM(doctors_count)/COUNT(DISTINCT(hospital_name)) AS average_doctors_per_hospital FROM hospital_data;
```

3. Top 3 Departments with the Highest Number of Patients

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

#Sol.

```
SELECT department, SUM(patients_count) AS total_patients_in_department FROM hospital_data GROUP BY department ORDER BY total_patients_in_department DESC LIMIT 3;
```

4. Hospital with the Maximum Medical Expenses

- Identify the hospital that recorded the highest medical expenses.

#Sol.

```
SELECT * FROM hospital_data ORDER BY medical_expenses DESC LIMIT 1;
```

5. Daily Average Medical Expenses

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

#Sol.

```
SELECT hospital_name, AVG(medical_expenses/(discharge_date-admission_date)) FROM hospital_data GROUP BY hospital_name;
```

6. Longest Hospital Stay

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

#Sol.

```
SELECT hospital_name, location, department, discharge_date-admission_date AS stay_period FROM hospital_data ORDER BY stay_period DESC LIMIT 1;
```

7. Total Patients Treated Per City

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

#Sol.

```
SELECT location, SUM(patients_count) AS city_wise_patients_treated FROM hospital_data GROUP BY location;
```

8. Average Length of Stay Per Department

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

#Sol.

```
SELECT department, AVG(discharge_date-admission_date) AS average_stay_length FROM hospital_data GROUP BY department;
```

9. Identify the Department with the Lowest Number of Patients

- Find the department with the least number of patients.

#Sol.

```
SELECT department, SUM(patients_count) AS department_wise_patients FROM hospital_data GROUP BY department ORDER BY department_wise_patients LIMIT 1;
```

10. Monthly Medical Expenses Report

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

#Sol.

```
SELECT EXTRACT(MONTH FROM discharge_date) AS months, SUM(medical_expenses) FROM hospital_data GROUP BY months ORDER BY months;
```