

### 30 Days SQL Micro course answer PDF

#### 1. Total Number of Patients

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

**Answer:-**

```
SELECT SUM(patients_count) AS TotalPatients  
FROM Hospitals;
```

#### 2. Average Number of Doctors per Hospital

Retrieve the average count of doctors available in each hospital.

**Answer:-**

```
SELECT hospital_name, ROUND(AVG(doctors_count),2) AS average_doctors  
FROM hospitals  
GROUP BY hospital_name;
```

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

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

**Answer:-**

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

#### 4. Hospital with the Maximum Medical Expenses

Identify the hospital that recorded the highest medical expenses.

**Answer:-**

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

#### 5. Daily Average Medical Expenses

Calculate the average medical expenses per day for each hospital.

**Answer:-**

```
SELECT hospital_name, ROUND(AVG(medical_expenses / (discharge_date - admission_date + 1)), 2)
AS avgmedicialexpenses
FROM Hospitals
WHERE medical_expenses IS NOT NULL
AND admission_date IS NOT NULL
AND discharge_date IS NOT NULL
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.

**Answer:-**

```
SELECT hospital_name, ((discharge_date - admission_date) + 1) AS total_stay
FROM Hospitals
ORDER BY total_stay DESC
LIMIT 1;
```

#### 7. Total Patients Treated Per City

Count the total number of patients treated in each city.

**Answer:-**

```
SELECT location, SUM(patients_count) AS total_patients
FROM Hospitals
GROUP BY location;
```

#### 8. Average Length of Stay Per Department

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

**Answer:-**

```
SELECT department, ROUND(AVG((discharge_date - admission_date)+1),2) AS avg_total_days
FROM Hospitals
GROUP BY department;
```

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

Find the department with the least number of patients.

**Answer:-**

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

#### 10. Monthly Medical Expenses Report

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

**Answer:-**

```
SELECT TO_CHAR(admission_date,'MM') AS month, ROUND(SUM(medical_expenses),2) AS
total_expenses
FROM Hospitals
GROUP BY month
ORDER BY month;
```