

## 30 Days SQL Micro Course Certificate Assignment:

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### 1. Total Number of Patients

Find the total number of patients across all hospitals.

#### Answer

Select Sum(Patients\_Count) as Number\_of\_Patients from hospital;

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### 2. Average Number of Doctors per Hospital

Retrieve the average count of doctors available in each hospital.

#### Answer

Select avg(Doctors\_Count) as average\_Doctors from hospital;

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### 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,sum(Patients\_Count) as Patients\_in\_departmetns from hospital  
group by department order by Patients\_in\_departmetns DESC limit 3;

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### 4. Hospital with the Maximum Medical Expenses

Identify the hospital that recorded the highest medical expenses.

#### Answer

Select Hospital\_name, sum(medical\_expenses) as max\_expenses from hospital  
group by Hospital\_name order by max\_expenses Desc;

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### 5. Daily Average Medical Expenses

Calculate the average medical expenses per day for each hospital.

#### Answer

Select avg(medical\_expenses) as avg\_expenses from hospital;

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### 6. Longest Hospital Stay

Find the patient with the longest stay

#### Answer

Select Admission\_date,discharge\_date,Age(discharge\_date,admission\_date) as longest\_stay from hospital order by longest\_stay desc limit 3;

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### **7. Total Patients Treated Per City**

Count the total number of patients treated in each city.

#### **Answer**

Select locations,sum(patients\_count) as Patients\_Treated\_Per\_City from hospital group by locations order by Patients\_Treated\_Per\_City desc;

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

Calculate the average number of days patients spend in each department

#### **Answer**

Select department, avg(Age(discharge\_date,admission\_date)) as average\_stay from hospital group by department order by average\_stay desc;

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

Find the department with the least number of patients.

#### **Answer**

Select department, coalesce(sum(patients\_count),0) as lowest\_patients from hospital group by department order by lowest\_patients ASC limit 3;

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### **10. Monthly Medical Expenses Report**

Calculate the total medical expenses for each month.

#### **Answer**

SELECT TO\_CHAR(admission\_date, 'YYYY-MM') AS monthly, SUM(medical\_expenses) AS total\_expenses FROM hospital GROUP BY monthly ORDER BY monthly;

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