30 Days SQL Micro Course Answer PDF

1. Total Number of Patients

Find the total number of patients across all hospitals.

Answer :-

SELECT SUM(Patients_Count) AS Total_Patients

FROM hospital_data;

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2. Average Number of Doctors per Hospital

Retrieve the average count of doctors available in each hospital.

Answer :-

SELECT Hospital_Name, AVG(Doctors_Count) AS avg_doctors

FROM hospital_data

GROUP BY Hospital_Name;

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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 highest_number_of_patients

FROM hospital_data

GROUP BY Department, Patients_Count

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, SUM(Medical_Expenses) AS highest_medical_expenses

FROM hospital_data

GROUP BY Hospital_Name

ORDER BY highest_medical_expenses DESC LIMIT 1;

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5. **Daily Average Medical Expenses.**

Calculate the average medical expenses per day for each hospital.

Answer :-

SELECT Hospital_Name,

ROUND(SUM(Medical_Expenses) / SUM(Discharge_Date - Admission_Date),2) AS

average_medical_expenses_per_day

FROM hospital_data

GROUP BY Hospital_Name

ORDER BY average_medical_expenses_per_day DESC;

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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,

       Discharge_Date - Admission_Date AS stay_duration

FROM hospital_data

ORDER BY stay_duration DESC LIMIT 1;

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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 hospital_data

GROUP BY Location

ORDER BY total_patients 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, ROUND(AVG(Discharge_Date - Admission_Date),2) AS avg_days_spent

FROM hospital_data

GROUP BY Department

ORDER BY avg_days_spent 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, MIN(Patients_Count) AS minimum_number_of_patients_per_department

FROM hospital_data

GROUP BY Department

ORDER BY minimum_number_of_patients_per_department ASC Limit 1;

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10. Monthly Medical Expenses Report

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 ASC;