30 Days SQL Micro Course Certificate Assignment

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 TOTAL_NO_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 hospital_name, avg(doctors_count) FROM hospital

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 total_patients FROM hospital

GROUP BY department

ORDER BY total_patients 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, medical_expenses

FROM hospital

ORDER BY 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,

   AVG(medical_expenses / NULLIF(Discharge_Date - Admission_Date, 0)) AS

average_expense_per_day

FROM hospital

GROUP BY hospital_name;

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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, department, patients_count,

   (Discharge_date - Admission_date) AS longest_stay

FROM hospital

ORDER BY longest_stay 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 Patients_treated FROM hospital

GROUP BY location;

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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(Discharge_date-admission_date) AS Days_spend

FROM hospital

GROUP BY department;

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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, SUM(Patients_Count) AS Min_patients FROM hospital

GROUP BY department

ORDER BY Min_patients 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.

ANSWER:-

SELECT

   TO_CHAR(Admission_Date, 'YYYY-MM') AS month,

   SUM(Medical_Expenses) AS total_expenses

FROM hospital

GROUP BY TO_CHAR(Admission_Date, 'YYYY-MM')

ORDER BY month;