30 Days SQL Micro Course Certificate Assignment

1. Total Number of Patients

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

Select Sum(Patients_Count) as "Total Number of Patients"

from Hospital_Data;

2. Average Number of Doctors per Hospital

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

Select Hospital_Name, Avg(Doctors_Count) as "Average Number of Doctors per Hospital"

from Hospital_Data

Group by Hospital_Name;

3. Top 3 Departments with the Highest Number of Patients

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

Select Department,Sum(Patients_Count) as "Patient_Count"

from Hospital_Data

Group by Department

order by sum(Patients_Count) desc limit 3;

4. Hospital with the Maximum Medical Expenses

o Identify the **hospital** that recorded the highest medical expenses.

Select Hospital_Name , sum(Medical_Expenses) as Total_Expenses

from Hospital_Data

group by Hospital_Name

order by Total_Expenses desc limit 1;

5. Daily Average Medical Expenses

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

Select Hospital_Name, Avg(Medical_Expenses) as Avg_Expenses

from Hospital_Data

group by Hospital_Name;

6. Longest Hospital Stay

o Find the patient with the longest stay by calculating the difference between

Discharge Date and Admission Date.

Select Hospital_Name,Department,Discharge_Date-Admission_Date as "Longest Hospital Stay"

from Hospital_Data

order by "Longest Hospital Stay" desc limit 1;

7. Total Patients Treated Per City

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

Select Location,Sum(Patients_Count) as "Total Patients Treated Per City"

from Hospital_Data

group by Location;

8. Average Length of Stay Per Department

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

Select department,avg(Discharge_Date-Admission_Date) as "average number of days patients spend in each department"

from Hospital_Data

group by Department;

9. Identify the Department with the Lowest Number of Patients

o Find the department with the least number of patients.

Select Department,sum(patients_count) as Patient_Count

from Hospital_Data

group by Department

order by sum(patients_count) asc limit 1;

10. Monthly Medical Expenses Report

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

SELECT

  DATE_TRUNC('month', admission_date) AS month,

  SUM(medical_expenses) AS total_expenses

FROM hospital_data

GROUP BY DATE_TRUNC('month', admission_date)

ORDER BY month;