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.

**Answer : -**

select sum(Patients\_Count) as total\_no\_of\_patient

from Hospitals;

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

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

**Answer : -**

select Hospital\_Name , avg(Doctors\_Count) as avg\_dr\_each\_hospital

from Hospitals

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.

**Answer : -**

select Department , sum(Patients\_Count ) as top\_Patients\_dapartment

from Hospitals

group by Department

order by top\_Patients\_dapartment desc limit 3 ;

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

o Identify the hospital that recorded the highest medical expenses.

**Answer : -**

select Hospital\_Name , sum (Medical\_Expenses) as highest\_medical\_expenses

from Hospitals

group by Hospital\_Name

order by highest\_medical\_expenses desc limit 1;

**5. Daily Average Medical Expenses**

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

**Answer : -**

SELECT Hospital\_Name,

sum (Medical\_Expenses) as total\_Medical\_Expenses ,

sum (Discharge\_Date - Admission\_Date) AS Total\_Days ,

round (

sum (Medical\_Expenses) /nullif (sum (Discharge\_Date - Admission\_Date),0),2) as per\_day\_avg\_Medical\_Expenses

FROM Hospitals

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.

**Answer : -**

select Hospital\_Name, Location, Department, Admission\_Date, Discharge\_Date,

(Discharge\_Date :: Date - Admission\_Date ::Date) as logest\_stay\_date

from Hospitals

order by logest\_stay\_date desc limit 1 ;

7. **Total Patients Treated Per City**

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

**Answer : -**

select Location as City ,

sum (Patients\_Count) as total\_Patients\_per\_city

from Hospitals

group by Location

order by total\_Patients\_per\_city desc ;

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

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

**Answer : -**

select Department , round (avg (Discharge\_Date - Admission\_Date),2) as avg\_length\_of\_stay\_days

from Hospitals

group by Department

order by avg\_length\_of\_stay\_days desc ;

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

O Find the department with the least number of patients.

**Answer : -**

select Department , sum (Patients\_Count ) as lowest\_no\_Patients

from Hospitals

group by Department

order by lowest\_no\_Patients asc limit 1 ;

**10. Monthly Medical Expenses Report**

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

**Answer : -**

SELECT

TO\_CHAR(Discharge\_Date::date, 'Month') AS month\_name,

DATE\_TRUNC('month', Discharge\_Date::date) AS month\_start,

SUM(REPLACE(Medical\_Expenses::TEXT, ',', '')::NUMERIC) AS total\_medical\_expenses

FROM Hospitals

GROUP BY month\_name, month\_start

ORDER BY month\_start;