30 Days SQL Micro Course Certificate Assignment Answers

1. Total Number of Patients

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

Answers-

```
SELECT SUM(patients_count) as total_patient
FROM hospital_data;
```

2. Average Number of Doctors per Hospital

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

Answers-

```
SELECT hospital_name, AVG(doctors_count) as total_avg_doctors
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.

Answers-

```
SELECT DISTINCT department, SUM(patients_count) as total_patients
FROM hospital_data
GROUP BY department
ORDER BY total_patients DESC
LIMIT 3;
```

4. Hospital with the Maximum Medical Expenses

o Identify the hospital that recorded the highest medical expenses.

Answers-

```
SELECT hospital_name, SUM(medical_expenses) AS total_medical_expense
```

FROM hospital_data

GROUP BY hospital_name

ORDER BY total_medical_expense DESC

LIMIT 1;

5. Daily Average Medical Expenses

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

Answers-

SELECT hospital_name,

  sum(medical_expenses)/ nullif(sum(discharge_date - admission_date), 0) as avg_daily_expense

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.

Answers-

SELECT hospital_name,patients_count , discharge_date - admission_date as stay_length

FROM hospital_data

ORDER BY stay_length DESC

LIMIT 1;

7. Total Patients Treated Per City

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

Answers-

SELECT location, sum(patients_count) as total_patients

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.

Answers-

SELECT department, AVG(discharge_date - admission_date) as avg_stay_length

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.

Answers-

SELECT department, SUM(patients_count) as lowest_patients

FROM hospital_data

GROUP BY department

ORDER BY lowest_patients

LIMIT 1;

10. Monthly Medical Expenses Report

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

Answers

SELECT TO_CHAR(admission_date, 'yyyy-mm') as month,sum(medical_expenses)

FROM hospital_data

GROUP BY to_char(admission_date, 'yyyy-mm')

ORDER BY month;