

30 Days SQL Micro Course Certificate Assignment Answers PDF

Divyanshi Nigam

1. Total Number of Patients

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

Answer:

```
select distinct hospital_name, sum(patients_count) as "Total_patient_count"
from hospital
group by hospital_name;
```

2. Average Number of Doctors per Hospital

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

Answer:

```
select distinct hospital_name, round(avg(doctors_count)) as "average_count_of_doctors"
from hospital
group by hospital_name;
```

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 distinct department, sum(patients_count) as "Patients_count"
from hospital
group by department
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, medical_expenses
from hospital
group by hospital_name, medical_expenses
order by medical_expenses desc;
```

5. Daily Average Medical Expenses

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

Answer:

```
SELECT hospital_name,  
       ROUND(SUM(medical_expenses) / COUNT(DISTINCT admission_date), 2) AS avg_daily_medical_expenses  
FROM hospital  
GROUP BY hospital_name;
```

6. Longest Hospital Stay

- Find the patient with the longest stay by calculating the difference between Discharge Date and Admission Date.

Answer:

```
select distinct hospital_name, DATEDIFF(discharge_date, admission_date) AS length_of_stay  
from hospital  
group by hospital_name, length_of_stay  
order by length_of_stay desc;
```

7. Total Patients Treated Per City

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

Answer:

```
select distinct location, sum(patients_count)  
from hospital  
group by location;
```

8. Average Length of Stay Per Department

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

Answer:

```
SELECT department,  
       ROUND(AVG(DATEDIFF(discharge_date, admission_date))) AS avg_length_of_stay  
FROM hospital  
GROUP BY department;
```

9. Identify the Department with the Lowest Number of Patients

- Find the department with the least number of patients

Answer:

```
WITH DepartmentRank AS (  
    SELECT department,  
           SUM(patients_count) AS total_patients,  
           RANK() OVER (ORDER BY SUM(patients_count)) AS rnk  
    FROM hospital  
    GROUP BY department  
)  
SELECT department, total_patients  
FROM DepartmentRank  
WHERE rnk = 1;
```

10. Monthly Medical Expenses Report

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

Answer:

```
SELECT  
    MONTH(admission_date) AS month,  
    ROUND(SUM(medical_expenses),2) AS total_expenses  
FROM hospital  
GROUP BY MONTH(admission_date)  
ORDER BY MONTH(admission_date);
```