

SQL Project - Hospital Management

1. Find the total number of patients across all hospitals

Answer:

```
SELECT SUM(patients_count) AS Total_patients_count  
FROM hospital_data;
```

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

Answer:

```
SELECT hospital_name, AVG(doctors_count) AS avg_doctors_count  
FROM hospital_data  
GROUP BY hospital_name;
```

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

Answer:

```
SELECT department, SUM(patients_count) AS highest_number_of_patients  
FROM hospital_data  
GROUP BY department  
ORDER BY SUM(patients_count)  
LIMIT 3;
```

4. Identify the hospital that recorded the highest medical expenses

Answer:

```
SELECT hospital_name, SUM(medical_expenses) AS highest_medical_expense  
FROM hospital_data  
GROUP BY hospital_name  
ORDER BY highest_medical_expense DESC  
LIMIT 1;
```

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

Answer:

```
SELECT hospital_name, admission_date, AVG(medical_expenses) AS avg_medical_expense  
FROM hospital_data
```

GROUP BY hospital_name, admission_date

Order BY hospital_name, admission_date;

6. 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-admission_date AS Long_stay_day

FROM hospital_data

ORDER BY Long_stay_day DESC

LIMIT 1;

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

Answer:

SELECT location, SUM(patients_count) AS total_patients_count

FROM hospital_data

GROUP BY location

ORDER BY total_patients_count;

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

Answer:

SELECT department, AVG(discharge_date-admission_date) AS Avg_stay_days

FROM hospital_data

GROUP BY department

ORDER BY Avg_stay_days DESC;

9. Find the department with the least number of patients

Answer:

SELECT department, SUM(patients_count) AS less_patients_count

FROM hospital_data

GROUP BY department

ORDER BY less_patients_count

LIMIT 1;

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

Answer:

```
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;
```