

30 Days SQL Micro Course Answer PDF

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_patients  
From Hospital;
```

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_doctors  
  
From Hospital  
  
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 total_patients  
  
From Hospital  
  
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.

Answer:

Select "Hospital Name", "Medical Expenses"

From Hospital

Order by "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", Round (Avg ("Medical Expenses"/(date_part ('day', To_date
("Discharge Date", 'DD-MM-YYYY')-To_date ("Admission date", 'DD-MM-YYYY')),1)),2)AS
Average_expense_per_day

From Hospital

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", "Admission Date", "Discharge Date",

DATE_PART('day', TO_DATE("Discharge Date", 'DD-MM-YYYY') - TO_DATE("Admission Date",
'DD-MM-YYYY')) AS stay_duration

From Hospital

Order by stay_duration desc limit 1;

7. Total Patients Treated Per City

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

Answer:

Select "location", sum ("patients count") AS total_patients

From Hospital

Group by "location"

Order by total_patients 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(Date_Part('day', TO_Date("Discharge Date", 'DD-MM-YYYY') - TO_Date("Admission Date", 'DD-MM-YYYY'))), 2) AS avg_stay_days

From hospital

Group by Department

Order by avg_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 total_patients

From Hospital

Group by Department

Order by total_patients ASC limit 1 ;

10. Monthly Medical Expenses Report

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

Answer:

```
SELECT TO_CHAR (TO_Date("Admission Date", 'DD-MM-YYYY'), 'YYYY-MM') AS month,
```

```
      SUM("Medical Expenses") AS total_expenses
```

```
From Hospital
```

```
GROUP BY TO_CHAR(TO_DATE("Admission Date", 'DD-MM-YYYY'), 'YYYY-MM')
```

```
Order by month;
```
