

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)
FROM hospital_data;
```

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_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.

Answer:-

```
SELECT Department , MAX(Patients_Count) AS MAX_Patients
FROM hospital_data
Group by Department
ORDER BY MAX_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, MAX(Medical_Expenses) AS MAX_Expenses
FROM hospital_data
GROUP BY Hospital_Name
ORDER BY MAX_Expenses DESC LIMIT 10;
```

5. Daily Average Medical Expenses

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

Answer:-

```
SELECT Hospital_Name,AVG(Medical_Expenses) AS AVG_Medical_Expenses
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.

Answer:-

```
SELECT Discharge_Date,Admission_Date,Department, (Discharge_date-Admission_Date )
AS Duration_in_Days
FROM hospital_data;
```

7. Total Patients Treated Per City

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

Answer:-

```
SELECT Location , SUM(Patients_Count)
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.

Answer:-

```
SELECT Department,AVG(Discharge_date - Admission_Date) AS Duration_in_days
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.

Answer:-

```
SELECT Department,MIN(Patients_Count) AS Least_Patients
FROM hospital_data
GROUP BY Department
ORDER BY Least_Patients LIMIT 10;
```

10. Monthly Medical Expenses Report

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

Answer:-

```
SELECT FORMAT(Admission_Date, 'MM') AS Admission_Month,
       FORMAT(Discharge_Date, 'MM') AS Discharge_Month,
       SUM(Medical_Expenses) AS Total_Medical_Expenses
FROM hospital_data
GROUP BY FORMAT(Admission_Date, 'MM'), FORMAT(Discharge_Date, 'MM') ;
```
