

```
create database SQL_Projects;
```

```
use SQL_Projects;
```

```
select * from hospital_data;
```

##Question 1. Total Number of Patients

```
select Hospital_Name,sum(Patients_Count) as Total_Patients from hospital_data
```

```
group by Hospital_Name
```

```
order by Total_Patients desc;
```

##Question 2.Average Number of Doctors per Hospital.

```
select Hospital_Name, avg(Doctors_count) as Avg_Doctors from hospital_data
```

```
group by Hospital_Name
```

```
order by Avg_Doctors desc;
```

##Question 3. Top 3 Departments with the Highest Number of Patients

```
select Hospital_Name,Department, Patients_count from hospital_data
```

```
order by Patients_count desc
```

```
limit 3;
```

##Question 4. Hospital with the Maximum Medical Expenses

```
select Hospital_Name, max(Medical_Expenses) as Maximum_Medical_expenses from  
hospital_data
```

```
group by Hospital_Name
```

```
order by Maximum_Medical_expenses desc;
```

##Question 5.Daily Average Medical Expenses

```

SELECT

    Hospital_Name,

    SUM(Medical_Expenses) / SUM(DATEDIFF(Discharge_Date, Admission_Date) + 1) AS
    Avg_Expense_Per_Day

FROM

    Hospital_Data

GROUP BY

    Hospital_Name;

```

Question 6. Find the patient with the longest stay by calculating the difference between Discharge Date and Admission Date.

```

SELECT

    *,

    DATEDIFF(Discharge_Date, Admission_Date) AS Stay_Duration

FROM

    Hospital_Data

ORDER BY

    Stay_Duration DESC

LIMIT 1;

```

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

```

select distinct Location, count(Patients_count) as Total_Patients from hospital_data

group by Location

order by Total_Patients desc;

```

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

```

SELECT

```

```
    Department,  
    AVG(DATEDIFF(STR_TO_DATE(Discharge_Date, '%d-%m-%Y'),  
STR_TO_DATE(Admission_Date, '%d-%m-%Y')) AS Avg_Days_Stayed  
FROM Hospital_Data  
GROUP BY Department;
```

Question 9. Find the department with the least number of patients.

```
select Department, Patients_Count from hospital_data  
order by Patients_Count limit 1;
```

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

```
SELECT  
    DATE_FORMAT(STR_TO_DATE(Admission_Date, '%d-%m-%Y'), '%Y-%m') AS Month_Year,  
    SUM(Medical_Expenses) AS Total_Expenses  
FROM Hospital_Data  
GROUP BY Month_Year  
ORDER BY Month_Year;
```