

-- Creating a table to store the hospital data.

```
CREATE TABLE hospital_data (  
    hospital_name TEXT,  
    location TEXT,  
    department TEXT,  
    doctors_count INTEGER,  
    patients_count INTEGER,  
    admission_date DATE,  
    discharge_date DATE,  
    medical_expenses NUMERIC  
);
```

--importing the CSV file into PostgreSQL and

```
COPY hospital_data  
FROM '/your/file/path/Hospital_Data.csv'  
WITH (FORMAT csv, HEADER true);
```

-- Calculating the total number of patients admitted across all hospitals.

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

-- This query calculates the average number of doctors available per hospital.

```
SELECT AVG(doctors_count) AS average_doctors
```

```
FROM hospital_data;
```

```
-- Find the top 3 departments with the highest total patient count across all hospitals
```

```
SELECT Department, SUM("patients_count") AS Total_Patients
```

```
FROM hospital_data
```

```
GROUP BY Department
```

```
ORDER BY Total_Patients DESC
```

```
LIMIT 3;
```

```
SELECT *FROM hospital_data;
```

```
-- Identify the hospital with the highest total medical expenses
```

```
SELECT "hospital_name", SUM("medical_expenses") AS Total_Expenses
```

```
FROM hospital_data
```

```
GROUP BY "hospital_name"
```

```
ORDER BY Total_Expenses DESC
```

```
LIMIT 1;
```

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

```
SELECT
```

```
    "hospital_name",
```

```
SUM("medical_expenses") / SUM("discharge_date"::DATE - "admission_date"::DATE) AS  
Avg_Expense_Per_Day  
FROM hospital_data  
GROUP BY "hospital_name"  
ORDER BY Avg_Expense_Per_Day DESC;
```

-- Finds the patient with the longest stay by calculating date difference

```
SELECT  
    "hospital_name",  
    "admission_date",  
    "discharge_date",  
    ("discharge_date"::DATE - "admission_date"::DATE) AS stay_duration  
FROM hospital_data  
ORDER BY stay_duration DESC  
LIMIT 1;
```

```
select * FROM hospital_data;
```

-- Counts total patients treated in each location (city)

```
SELECT  
    "location",  
    SUM("patients_count") AS total_patients  
FROM hospital_data  
GROUP BY "location"  
ORDER BY total_patients DESC;
```

-- Calculates average stay duration for each department

SELECT

 "department",

 AVG("discharge_date"::DATE - "admission_date"::DATE) AS avg_stay_days

FROM hospital_data

GROUP BY "department"

ORDER BY avg_stay_days DESC;

-- Identifies department with the least number of patient records

SELECT

 "department",

 COUNT(*) AS patient_count

FROM hospital_data

GROUP BY "department"

ORDER BY patient_count ASC

LIMIT 1;

-- Summarizes total medical expenses for each month based on admission date

SELECT

 TO_CHAR("admission_date"::DATE, 'YYYY-MM') AS month,

 SUM("medical_expenses") AS total_expenses

FROM hospital_data

GROUP BY month

ORDER BY month;