

30 Days SQL Micro Course Certificate Assignment

```
CREATE DATABASE hospital;
```

```
CREATE TABLE hospitaldata(  
    Hospital_Name VARCHAR(100),  
    LOCATION VARCHAR(50),  
    DEPARTMENT VARCHAR(50),  
    DOCTORS_COUNT INT,  
    PATIENTS_COUNT INT,  
    ADMISSION_DATE DATE,  
    DISCHARGE_DATE DATE,  
    MEDICAL_EEXPENSES NUMERIC(10,2)  
  
)
```

```
SELECT * FROM hospitaldata
```

```
COPY hospitaldata(  
Hospital_Name,Location,Department,Doctors_Count,Patients_Count,Admission_Date,  
Discharge_Date,Medical_Expenses  
)  
FROM 'D:\Hospital_Data.csv'  
CSV HEADER
```

--1. Write an SQL query to find the total number of patients across all hospitals.

```
SELECT SUM(patients_count) AS total_patient  
FROM hospitaldata
```

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

```
SELECT AVG(doctors_count) AS avg_doctors_per_hospital  
FROM hospitaldata;
```

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

```
SELECT department, SUM(patients_count) AS total_patients  
FROM HospitalData  
GROUP BY department  
ORDER BY total_patients DESC  
LIMIT 3;
```

--4. Identify the hospital that recorded the highest medical expenses

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

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

```
SELECT hospital_name, AVG(medical_expenses / (discharge_date-admission_date)) AS  
avg_expenses_per_day  
FROM hospitaldata  
GROUP BY hospital_name;
```

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

```
SELECT location, COUNT(*) AS Total_Patients
FROM hospitaldata
GROUP BY location
ORDER BY Total_Patients DESC;
```

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

```
SELECT "department",
       AVG("discharge_date" - "admission_date") AS Avg_Stay_Duration
FROM hospitaldata
GROUP BY "department"
ORDER BY Avg_Stay_Duration DESC;
```

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

```
SELECT "department", COUNT(*) AS Patient_Count
FROM hospitaldata
GROUP BY "department"
ORDER BY Patient_Count ASC
LIMIT 1;
```

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

```
SELECT
  TO_CHAR("admission_date", 'YYYY-MM') AS Month,
  SUM("medical_expenses") AS Total_Medical_Expenses
FROM hospitaldata
GROUP BY Month
ORDER BY Month;
```