SQL PROJECT BASED ON HOSPITAL DATASET

```
create table hospital (
                Hospital_Name varchar,
                Loc varchar,
                Department varchar,
                 Doctors_Count numeric,
                 Patients_Count numeric,
                Admission_Date Date,
                Discharge_Date Date,
                Medical_Expenses numeric
);


copy hospital (
                Hospital_Name,
                Loc,
                 Department,
                Doctors_Count,
                Patients_Count,
                Admission_Date,
                Discharge_Date,
                Medical_Expenses
)
from 'C:\Users\Smile\Downloads\Hospital_Data.csv - Shortcut.lnk'
csv header;

select * from hospital;
```

--1. Total Number of Patients
--Write an SQL query to find the total number of patients across all hospitals.
`select sum(patients_count) as Total_number_of_patients from hospital;`

--2. Average Number of Doctors per Hospital
--Retrieve the average count of doctors available in each hospital.
`select avg(doctors_count) as avg_no_of_doc_per_hosp from hospital;`

--3. Top 3 Departments with the Highest Number of Patients
--Find the top 3 hospital departments that have the highest number of patients.
`select department,patients_count from hospital order by patients_count desc limit 3;`

--4. Hospital with the Maximum Medical Expenses
--Identify the hospital that recorded the highest medical expenses.
`select hospital_name,medical_expenses from hospital where medical_expenses=(select max(medical_expenses) from hospital);`

--5. Daily Average Medical Expenses
--Calculate the average medical expenses per day for each hospital.
`select hospital_name,medical_expenses,(discharge_date-admission_date+1) as total_days,(discharge_date-admission_date+1)/(medical_expenses)as avg_expenses_perday from hospital;`

--6. Longest Hospital Stay
--Find the patient with the longest stay by calculating the difference between
--Discharge Date and Admission Date.
`select max(admission_date-discharge_date) as long_stay from hospital;`

--7. Total Patients Treated Per City
--Count the total number of patients treated in each city.
`select loc,sum(patients_count) as total_patients_treated from hospital group by loc;`

--8. Average Length of Stay Per Department
--Calculate the average number of days patients spend in each department.
`select department,avg(discharge_date-admission_date)as avg_stay_per_department from hospital group by department;`

--9. Identify the Department with the Lowest Number of Patients
--Find the department with the least number of patients.
`select department,sum(patients_count)as dept_with_lowest_patients from hospital group by department order by dept_with_lowest_patients asc limit 1;`

--10. Monthly Medical Expenses Report
--•Group the data by month and calculate the total medical expenses for each month.
`select extract(month from admission_date)as month,sum(medical_expenses)as total_expenses_by_month from hospital group by month order by month asc;`