

SQL Project Report

--created the database with hospital name and patients table under it.

DROP TABLE IF EXISTS patients;

CREATE TABLE patients

(HospitalName VARCHAR(50) NOT NULL,

Location VARCHAR(50),

Department VARCHAR(50),

DoctorsCount INT,

PatientsCount INT,

Admission_Date DATE,

Discharge_Date DATE,

Medical_Expenses NUMERIC(10,2)

);

SELECT* FROM patients;

--importing data into table

--thorough direct way

--1 write an sql to find the total number of patients across all hospitals.

SELECT SUM(patientscount) AS total_patients

FROM patients;

--2 avg no of doctors per hospital

SELECT AVG(doctorscount), hospitalname

FROM patients

GROUP BY hospitalname;

--3 top 3 hospital department with the highest number of patients

SELECT DISTINCT department, SUM(patientscount) AS total_patientcount

FROM patients

GROUP BY department

ORDER BY total_patientcount DESC

LIMIT 3;

--4 HOSPITAL with maximum medical expenses

```
SELECT DISTINCT hospitalname , SUM(medical_expenses) AS total_medical_expense  
FROM patients
```

GROUP BY hospitalname

ORDER BY total_medical_expense DESC;

-- 5 calculate the average medical expenses per day for each hospital

```
SELECT AVG(medical_expenses) AS avg_medicl_expense , hospitalname  
FROM patients
```

GROUP BY hospitalname;

--6 Longest hospital stay - find the patient with the longest stay by calculating the difference between

--discharge date and admission date

```
SELECT patientscount, hospitalname, (discharge_date - admission_date) AS hospital_stay  
FROM patients
```

ORDER BY hospital_stay DESC LIMIT 1;

--7 COUNT the total number of patients treated in each city

```
SELECT SUM(patientscount), location  
FROM patients
```

GROUP BY location;

--8 calculate the avg no of days patients spend in each department

```
SELECT department, AVG(discharge_date - admission_date) AS avg_stay  
FROM patients
```

GROUP BY department;

--9 find the department with the least no of patients

```
SELECT department, SUM(patientscount) AS patient_count  
FROM patients
```

GROUP BY department

ORDER BY patient_count ASC LIMIT 1;

--10 Monthly medical expense report - group the data by month and calculate the total medical expense for each month

```
SELECT SUM(medical_expenses) , TO_CHAR(admission_date, 'yyyy-mm') AS month  
  
FROM patients  
  
GROUP BY TO_CHAR(admission_date, 'yyyy-mm')  
  
ORDER BY month;
```