

SQL Practical – Hospital Patient Management

Question

Create the following database and run required SQL queries.

1. Create two tables:
 - Patients(PatientID, PatientName, Disease, DoctorAssigned, AdmissionDate)
 - Billing(BillNo, PatientID, Amount)
2. Identify primary and foreign keys.
3. Insert 2 records in each table.
4. Add column **PaymentDate** to Billing.
5. Find total number of patients suffering from “Fever”.
6. List all patients treated by “Dr. Sharma” with billing records.
7. Display total billing amount for each disease.

Solutions

1. Create Database and Tables

```
CREATE DATABASE HospitalDB;
USE HospitalDB;

CREATE TABLE Patients(
    PatientID INT PRIMARY KEY ,
    PatientName VARCHAR(40) ,
    Disease VARCHAR(20) ,
    DoctorAssigned VARCHAR(30) ,
    AdmissionDate DATE
```

```
);

CREATE TABLE Billing(
    BillNo INT PRIMARY KEY,
    PatientID INT,
    Amount DECIMAL(10,2),
    FOREIGN KEY (PatientID) REFERENCES Patients(PatientID)
);
```

2. Insert Records

```
INSERT INTO Patients VALUES
(1,'Rohit','Fever','Dr. Sharma','2023-01-10'),
(2,'Megha','Infection','Dr. Verma','2023-02-12'),
(3,'Ankit','Fever','Dr. Sharma','2023-03-05');

INSERT INTO Billing VALUES
(101,1,1500),
(102,2,2200),
(103,3,1800);
```

3. Add PaymentDate

```
ALTER TABLE Billing ADD PaymentDate DATE;
```

4. Count Fever Patients

```
SELECT COUNT(*)
FROM Patients
WHERE Disease='Fever';
```

5. Patients Treated by Dr. Sharma with Billing

```
SELECT P.PatientName, P.Disease
FROM Patients P
JOIN Billing B ON P.PatientID = B.PatientID
WHERE DoctorAssigned='Dr. Sharma';
```

6. Total Billing Amount Per Disease

```
SELECT Disease, SUM(Amount) AS TotalAmount  
FROM Patients P  
JOIN Billing B ON P.PatientID = B.PatientID  
GROUP BY Disease;
```