

```
CREATE TABLE Departmentss (  
    dept_id INT PRIMARY KEY,  
    dept_name VARCHAR(50)  
);
```

```
CREATE TABLE Doctor (  
    doctor_id INT PRIMARY KEY,  
    doctor_name VARCHAR(100),  
    dept_id INT,  
    FOREIGN KEY (dept_id) REFERENCES Departmentss(dept_id)  
);
```

```
CREATE TABLE Patientss (  
    patient_id INT PRIMARY KEY,  
    patient_name VARCHAR(100),  
    city VARCHAR(50)  
);
```

```
CREATE TABLE Appointmentss (  
    appointment_id INT PRIMARY KEY,  
    patient_id INT,  
    doctor_id INT,  
    appointment_date DATE,  
    diagnosis VARCHAR(255),  
    FOREIGN KEY (patient_id) REFERENCES Patientss(patient_id),  
    FOREIGN KEY (doctor_id) REFERENCES Doctor(doctor_id)  
);
```

Inserting Sample Data:

```
INSERT INTO Departmentss VALUES (1, 'Cardiology'), (2, 'Neurology'), (3, 'Orthopedics');
```

dept_id	dept_name
1	Cardiology
2	Neurology
3	Orthopedics

3 rows in set (0.0008 sec)

INSERT INTO Doctor VALUES

(101, 'Dr. Babu', 1),

(102, 'Dr. Rao', 2),

(103, 'Dr. Mehta', 3);

doctor_id	doctor_name	dept_id
101	Dr. Babu	1
102	Dr. Rao	2
103	Dr. Mehta	3

3 rows in set (0.0008 sec)

INSERT INTO Patientss VALUES

(1, 'Anjali', 'Delhi'),

(2, 'Ravi', 'Mumbai'),

(3, 'Priya', 'Delhi'),

(4, 'Karan', 'Chennai');

patient_id	patient_name	city
1	Anjali	Delhi
2	Ravi	Mumbai
3	Priya	Delhi
4	Karan	Chennai

4 rows in set (0.0007 sec)

```
INSERT INTO Appointmentss VALUES
(1001, 1, 101, '2025-07-01', 'Chest Pain'),
(1002, 2, 102, '2025-07-02', 'Headache'),
(1003, 3, 101, '2025-07-03', 'Chest Pain'),
(1004, 4, 103, '2025-07-04', 'Fracture');
```

appointment_id	patient_id	doctor_id	appointment_date	diagnosis
1001	1	101	2025-07-01	Chest Pain
1002	2	102	2025-07-02	Headache
1003	3	101	2025-07-03	Chest Pain
1004	4	103	2025-07-04	Fracture

4 rows in set (0.0008 sec)

Queries

1. Display all the departments in the hospital.

```
SELECT * FROM Departmentss;
```

dept_id	dept_name
1	Cardiology
2	Neurology
3	Orthopedics

3 rows in set (0.0008 sec)

2. Show all patients who are from 'Delhi'.

```
SELECT * FROM Patientss WHERE city = 'Delhi';
```

patient_id	patient_name	city
1	Anjali	Delhi
3	Priya	Delhi

2 rows in set (0.0008 sec)

3. Display the details of appointments including patient name, doctor name, date, and diagnosis.

SELECT

a.appointment_id,
p.patient_name,
d.doctor_name,
a.appointment_date,
a.diagnosis

FROM

Appointmentss a

JOIN Patientss p ON a.patient_id = p.patient_id

JOIN Doctor d ON a.doctor_id = d.doctor_id;

appointment_id	patient_name	doctor_name	appointment_date	diagnosis
1001	Anjali	Dr. Babu	2025-07-01	Chest Pain
1003	Priya	Dr. Babu	2025-07-03	Chest Pain
1002	Ravi	Dr. Rao	2025-07-02	Headache
1004	Karan	Dr. Mehta	2025-07-04	Fracture

4 rows in set (0.0011 sec)

4. Find the number of appointments handled by each doctor.

SELECT

d.doctor_name,
COUNT(a.appointment_id) AS appointment_count

FROM

Doctor d

LEFT JOIN Appointmentss a ON d.doctor_id = a.doctor_id

GROUP BY d.doctor_name;

doctor_name	appointment_count
Dr. Babu	2
Dr. Rao	1
Dr. Mehta	1

3 rows in set (0.0010 sec)

5. List patients who visited 'Dr. Babu'.

```
SELECT DISTINCT
    p.patient_name
FROM
    Appointmentss a
    JOIN Patientss p ON a.patient_id = p.patient_id
    JOIN Doctor d ON a.doctor_id = d.doctor_id
WHERE
    d.doctor_name = 'Dr. Babu';
```

```
+-----+
| patient_name |
+-----+
| Anjali      |
| Priya       |
+-----+
2 rows in set (0.0008 sec)
```

6. Update the diagnosis for appointment ID 1001 to 'Mild Chest Pain'.

```
UPDATE Appointmentss
SET diagnosis = 'Mild Chest Pain'
WHERE appointment_id = 1001;
```

```
+-----+-----+-----+-----+-----+
| appointment_id | patient_id | doctor_id | appointment_date | diagnosis |
+-----+-----+-----+-----+-----+
| 1001           | 1          | 101       | 2025-07-01       | Mild Chest Pain |
| 1002           | 2          | 102       | 2025-07-02       | Headache       |
| 1003           | 3          | 101       | 2025-07-03       | Chest Pain     |
| 1004           | 4          | 103       | 2025-07-04       | Fracture       |
+-----+-----+-----+-----+-----+
4 rows in set (0.0008 sec)
```

7. Delete the appointment for patient ID 3.

```
DELETE FROM Appointmentss
WHERE patient_id = 3;
```

```
MySQL localhost:33060+ ssl pra SQL > select * from Appointmentss;
```

appointment_id	patient_id	doctor_id	appointment_date	diagnosis
1001	1	101	2025-07-01	Mild Chest Pain
1002	2	102	2025-07-02	Headache
1004	4	103	2025-07-04	Fracture

```
3 rows in set (0.0009 sec)
```