

Welcome to the MySQL monitor.

```
mysql> show databases;
```

```
+-----+
| Database          |
+-----+
| information_schema |
| mohit              |
| mysql              |
| performance_schema |
| sys                |
+-----+
```

5 rows in set (0.00 sec)

```
mysql> use mohit;
```

Database changed

```
mysql> CREATE TABLE Students (
->     Student_ID VARCHAR(10) PRIMARY KEY,
->     Student_Name VARCHAR(100),
->     Department VARCHAR(50)
-> );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> CREATE TABLE Courses (
->     Course_ID VARCHAR(10) PRIMARY KEY,
->     Course_Name VARCHAR(100),
->     Department VARCHAR(50)
-> );
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> CREATE TABLE Registrations (
->     Reg_ID INT AUTO_INCREMENT PRIMARY KEY,
->     Student_ID VARCHAR(10),
->     Course_ID VARCHAR(10),
->     Semester INT,
->     FOREIGN KEY (Student_ID) REFERENCES
Students(Student_ID),
->     FOREIGN KEY (Course_ID) REFERENCES Courses(Course_ID)
-> );
```

Query OK, 0 rows affected (0.08 sec)

```
mysql> INSERT INTO Students VALUES
-> ('S101', 'Ravi Kumar', 'CSE'),
-> ('S102', 'Sita Sharma', 'CSE'),
-> ('S103', 'Amit Verma', 'ECE');
```

Query OK, 3 rows affected (0.02 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> INSERT INTO Courses VALUES
-> ('CSE101', 'Data Structures', 'CSE'),
-> ('CSE102', 'DBMS', 'CSE'),
```

```

-> ('ECE201', 'Digital Circuits', 'ECE');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

```

```

mysql> INSERT INTO Registrations (Student_ID, Course_ID,
Semester) VALUES
-> ('S101', 'CSE101', 3),
-> ('S101', 'CSE102', 3),
-> ('S102', 'CSE101', 3),
-> ('S103', 'ECE201', 3);
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0

```

```

mysql> SELECT s.Student_Name, c.Course_Name, r.Semester
-> FROM Registrations r
-> JOIN Students s ON r.Student_ID = s.Student_ID
-> JOIN Courses c ON r.Course_ID = c.Course_ID
-> WHERE s.Student_ID = 'S101';
+-----+-----+-----+
| Student_Name | Course_Name      | Semester |
+-----+-----+-----+
| Ravi Kumar   | Data Structures  | 3        |
| Ravi Kumar   | DBMS             | 3        |
+-----+-----+-----+
2 rows in set (0.00 sec)

```

```

mysql> SELECT c.Course_Name, COUNT(r.Student_ID) AS
Total_Students
-> FROM Registrations r
-> JOIN Courses c ON r.Course_ID = c.Course_ID
-> GROUP BY c.Course_ID, c.Course_Name;
+-----+-----+
| Course_Name      | Total_Students |
+-----+-----+
| Data Structures  | 2              |
| DBMS             | 1              |
| Digital Circuits | 1              |
+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> SELECT s.Student_Name, c.Course_Name, r.Semester
-> FROM Registrations r
-> JOIN Students s ON r.Student_ID = s.Student_ID
-> JOIN Courses c ON r.Course_ID = c.Course_ID
-> WHERE r.Semester = 3;
+-----+-----+-----+
| Student_Name | Course_Name      | Semester |
+-----+-----+-----+
| Ravi Kumar   | Data Structures  | 3        |
| Ravi Kumar   | DBMS             | 3        |
| Sita Sharma  | Data Structures  | 3        |
| Amit Verma   | Digital Circuits | 3        |
+-----+-----+-----+

```

```
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> SELECT s.Student_Name, c.Course_Name
-> FROM Registrations r
-> JOIN Students s ON r.Student_ID = s.Student_ID
-> JOIN Courses c ON r.Course_ID = c.Course_ID
-> WHERE s.Department = 'CSE';
```

```
+-----+-----+
| Student_Name | Course_Name |
+-----+-----+
| Ravi Kumar   | Data Structures |
| Ravi Kumar   | DBMS           |
| Sita Sharma  | Data Structures |
+-----+-----+
3 rows in set (0.00 sec)
```