

# SQL Practical – University Hostel Management

## Question

1. Create two tables:
  - Students(RollNo, StudentName, Course, HostelName, RoomNumber)
  - HostelFees(ReceiptNo, RollNo, AmountPaid)
2. Identify primary and foreign keys.
3. Insert 2 records in each table.
4. Add column **PaymentDate** to HostelFees.
5. Count students staying in “Aravali Hostel”.
6. List all B.Tech students who paid hostel fees.
7. Find total hostel fees collected from each hostel.

## Solutions

### 1. Create Database and Tables

```
CREATE DATABASE HostelDB;
USE HostelDB;

CREATE TABLE Students(
    RollNo CHAR(6) PRIMARY KEY,
    StudentName VARCHAR(40),
    Course VARCHAR(20),
    HostelName VARCHAR(20),
    RoomNumber INT
);
```

```
CREATE TABLE HostelFees(
    ReceiptNo INT PRIMARY KEY,
    RollNo CHAR(6),
    AmountPaid INT,
    FOREIGN KEY (RollNo) REFERENCES Students(RollNo)
);
```

## 2. Insert Records

```
INSERT INTO Students VALUES
('S101','Arjun','B.Tech','Aravali Hostel',101),
('S102','Meera','BBA','Shivalik Hostel',202),
('S103','Riya','B.Tech','Aravali Hostel',103);

INSERT INTO HostelFees VALUES
(1,'S101',50000),
(2,'S102',45000),
(3,'S103',52000);
```

## 3. Add PaymentDate

```
ALTER TABLE HostelFees ADD PaymentDate DATE;
```

## 4. Count Students in Aravali Hostel

```
SELECT COUNT(*)
FROM Students
WHERE HostelName='Aravali Hostel';
```

## 5. B.Tech Students Who Paid Hostel Fees

```
SELECT S.StudentName, S.Course
FROM Students S
JOIN HostelFees H
ON S.RollNo = H.RollNo
WHERE Course='B.Tech';
```

## 6. Total Fees Per Hostel

```
SELECT HostelName , SUM(AmountPaid) AS TotalCollected  
FROM Students S  
JOIN HostelFees H  
ON S.RollNo = H.RollNo  
GROUP BY HostelName;
```