

## 9. Write a query which describes Referential Integrity Constraints using following Clauses

### -- Create Department table

```
CREATE TABLE Department (  
    dept_id INT PRIMARY KEY,  
    dept_name VARCHAR(100)  
);
```

### -- Insert data into Department table

```
INSERT INTO Department VALUES(1, 'Computer Science');  
INSERT INTO Department VALUES(2, 'Electrical Engineering');  
INSERT INTO Department VALUES(3, 'Mechanical Engineering');
```

### -- Create Student table with foreign key constraint

```
CREATE TABLE Student (  
    student_id INT PRIMARY KEY,  
    name VARCHAR(100),  
    dept_id INT,  
    FOREIGN KEY (dept_id) REFERENCES Department(dept_id) ON DELETE CASCADE -- or  
    ON DELETE SET NULL  
);
```

### -- Insert data into Student table

```
INSERT INTO Student VALUES (1, 'John Doe', 1 );  
INSERT INTO Student VALUES (2, 'Alice Smith', 2);  
INSERT INTO Student VALUES (3, 'Bob Johnson', 1);  
INSERT INTO Student VALUES (4, 'Emma Lee', 3);
```

### -- Select Student

```
SELECT* from Student;
```

### -- Select department

```
SELECT* From Department
```

### -- Delete from the department and in student it also changes

```
Delete From Department Where DEPT_ID = 3;  
select * from Student;  
Delete * from Department;
```