

ALGORITHM : RAINBOW SCHOOL SYSTEM

Initialize Database Connection:

- Connect to the SQL Server database using appropriate connection details.
- Insert Student:
- Accept input data (studentName, classID, subjectID).
- Validate input data.
- Execute the SQL query to insert a new student into the Student table.

```
INSERT INTO Student (StudentName, ClassID, SubjectID)
VALUES ('John Doe', 1, 101); -- Example data, replace with actual values
```

Update Student:

- Accept input data (studentName, classID, subjectID) and the target RollNo.
- Validate input data.
- Execute the SQL query to update an existing student in the Student table.

```
UPDATE Student
SET StudentName = 'Updated Name'
WHERE STUDENTID= 1;
```

Query Students by Class:

- Accept input data (classID).
- Validate input data.
- Execute the SQL query to retrieve students in a specific class.

```
SELECT * FROM Student WHERE ClassID = 1;
```

Create Classes Table:

- Execute the SQL query to create the Classes table.

```
CREATE TABLE Classes (
    classId INT PRIMARY KEY IDENTITY(1,1),
    className NVARCHAR(50),
    classFloor INT
);
```

Create Subjects Table:

- Execute the SQL query to create the Subjects table.

```
CREATE TABLE Subjects (
    SubjectID INT PRIMARY KEY IDENTITY(1,1),
    SubjectName NVARCHAR(50),
    TeacherName NVARCHAR(50));
```