

SOURCE CODE

Create a School Database

Description

Using SQL Server MMC, create tables and indexes for storing students, subjects and classes data.

```
CREATE DATABASE RainbowSchoolDB;  
USE RainbowSchoolDB;
```

```
-- Student Table
```

```
-- Step 1: Create Classes Table
```

```
CREATE TABLE Classes (  
    ClassID INT PRIMARY KEY,  
    ClassName VARCHAR(50)  
);
```

```
-- Step 2: Create Subjects Table
```

```
CREATE TABLE Subjects (  
    SubjectID INT PRIMARY KEY,  
    SubjectName VARCHAR(50)  
);
```

```
-- Step 3: Create Student Table with Foreign Key Constraint
```

```
CREATE TABLE Student (  
    StudentID INT PRIMARY KEY,  
    FirstName VARCHAR(50),  
    LastName VARCHAR(50),  
    ClassID INT FOREIGN KEY REFERENCES Classes(ClassID)  
);
```

```
-- Add Index on Student Table
```

```
CREATE INDEX idx_Student_ClassID ON Student(ClassID);
```

```
-- Index on Subjects Table
```

```
CREATE INDEX idx_Subjects_SubjectName ON Subjects(SubjectName);
```

```
-- Insert dummy data into Classes table
```

```
INSERT INTO Classes (ClassID, ClassName) VALUES  
(1, 'Class 1A'),
```

```
(2, 'Class 1B'),  
(3, 'Class 2A'),  
(4, 'Class 2B');
```

-- Insert dummy data into Subjects table

```
INSERT INTO Subjects (SubjectID, SubjectName) VALUES  
(101, 'Mathematics'),  
(102, 'English'),  
(103, 'Science'),  
(104, 'History');
```

-- Insert dummy data into Student table

```
INSERT INTO Student (StudentID, FirstName, LastName, ClassID) VALUES  
(1, 'John', 'Doe', 1),  
(2, 'Jane', 'Smith', 2),  
(3, 'Bob', 'Johnson', 3),  
(4, 'Alice', 'Williams', 4);
```

```
Select * from Student;
```

```
Select * from Subjects;
```

```
Select * from Classes;
```