

1. Create a Database

```
CREATE DATABASE SchoolDB;
```

2. Use a Database

```
USE SchoolDB;
```

3. Create a Table

```
CREATE TABLE Students (  
    StudentID INT PRIMARY KEY,  
    FirstName VARCHAR(50),  
    LastName VARCHAR(50),  
    Age INT,  
    Grade VARCHAR(10)  
);
```

4. Insert Data into Table

```
INSERT INTO Students (StudentID, FirstName, LastName, Age, Grade)  
VALUES (1, 'John', 'Doe', 15, '10th');
```

5. Insert Multiple Rows

```
INSERT INTO Students (StudentID, FirstName, LastName, Age, Grade)  
VALUES  
(2, 'Jane', 'Smith', 14, '9th'),  
(3, 'Mike', 'Brown', 16, '11th');
```

6. Select All Data

```
SELECT * FROM Students;
```

7. Select Specific Columns

```
SELECT FirstName, Grade FROM Students;
```

8. Update a Record

```
UPDATE Students
```

```
SET Age = 17
```

```
WHERE StudentID = 3;
```

9. Delete a Record

```
DELETE FROM Students
```

```
WHERE StudentID = 2;
```

10. Add a New Column to Table

```
ALTER TABLE Students
```

```
ADD Email VARCHAR(100);
```

11. Drop a Column

```
ALTER TABLE Students
```

```
DROP COLUMN Email;
```

12. Rename a Column

```
ALTER TABLE Students
```

```
RENAME COLUMN Grade TO ClassGrade;
```

(Note: The syntax may vary by database system like MySQL, PostgreSQL, etc.)

13. Create Another Table (e.g. Courses)

```
CREATE TABLE Courses (
```

```
    CourseID INT PRIMARY KEY,
```

```
    CourseName VARCHAR(100),  
    TeacherName VARCHAR(100)  
);
```

14. Join Two Tables

```
SELECT Students.FirstName, Courses.CourseName  
FROM Students  
JOIN Enrollments ON Students.StudentID = Enrollments.StudentID  
JOIN Courses ON Enrollments.CourseID = Courses.CourseID;
```

15. Create Enrollments Table for Relationships

```
CREATE TABLE Enrollments (  
    StudentID INT,  
    CourseID INT,  
    PRIMARY KEY (StudentID, CourseID),  
    FOREIGN KEY (StudentID) REFERENCES Students(StudentID),  
    FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)  
);
```

16. Order Records

```
SELECT * FROM Students  
ORDER BY Age DESC;
```

17. Use WHERE Clause

```
SELECT * FROM Students  
WHERE Age > 15;
```

18. Use LIKE for Pattern Matching

```
SELECT * FROM Students  
WHERE FirstName LIKE 'J%';
```

19. Count Records

```
SELECT COUNT(*) FROM Students;
```

20. Group Records

```
SELECT Grade, COUNT(*) AS StudentCount  
FROM Students  
GROUP BY Grade;
```

21. HAVING Clause (with GROUP BY)

```
SELECT Grade, COUNT(*) AS StudentCount  
FROM Students  
GROUP BY Grade  
HAVING COUNT(*) > 1;
```

22. Create a View

```
CREATE VIEW StudentSummary AS  
SELECT FirstName, LastName, Grade  
FROM Students;
```

23. Use the View

```
SELECT * FROM StudentSummary;
```

24. Drop a Table

```
DROP TABLE Enrollments;
```

25. Drop a Database

```
DROP DATABASE SchoolDB;
```

```
INSERT INTO Students (StudentID, FirstName, LastName, Age, Grade)
```

```
VALUES
```

```
(1, 'John', 'Doe', 15, '10th'),
```

```
(2, 'Jane', 'Smith', 14, '9th'),
```

```
(3, 'Mike', 'Brown', 16, '11th'),
```

```
(4, 'Sara', 'Wilson', 15, '10th'),
```

```
(5, 'David', 'Lee', 17, '12th');
```

```
INSERT INTO Courses (CourseID, CourseName, TeacherName)
```

```
VALUES
```

```
(101, 'Mathematics', 'Mr. Kumar'),
```

```
(102, 'Science', 'Ms. Patel'),
```

```
(103, 'History', 'Mrs. Sharma'),
```

```
(104, 'English', 'Mr. Verma'),
```

```
(105, 'Computer Science', 'Ms. Gupta');
```