

SQL Code

```
1
2  -- Create Database
3  CREATE DATABASE StudentManagement;
4  USE StudentManagement;
5
6  -- Create Students Table
7  CREATE TABLE Students (
8      StudentID INT PRIMARY KEY AUTO_INCREMENT,
9      Name VARCHAR(50),
10     Gender CHAR(1),
11     Age INT,
12     Grade VARCHAR(2),
13     MathScore INT,
14     ScienceScore INT,
15     EnglishScore INT
16 );
17
18 -- Insert Data
19 INSERT INTO Students (Name, Gender, Age, Grade, MathScore, ScienceScore, EnglishScore)
e) VALUES
20 ('Amit', 'M', 16, '10', 85, 78, 82),
21 ('Neha', 'F', 15, '9', 72, 88, 90),
22 ('Rahul', 'M', 17, '11', 91, 86, 89),
23 ('Pooja', 'F', 16, '10', 67, 74, 80),
24 ('Karan', 'M', 15, '9', 88, 90, 85),
25 ('Sneha', 'F', 17, '11', 92, 91, 93),
26 ('Arjun', 'M', 16, '10', 76, 70, 68),
27 ('Riya', 'F', 15, '9', 81, 79, 84),
28 ('Vikas', 'M', 17, '11', 69, 65, 72),
29 ('Anjali', 'F', 16, '10', 90, 88, 91);
30
31 -- Queries
32
33 -- Show all students
34 SELECT * FROM Students;
35
36 -- Average score in each subject
37 SELECT
38     AVG(MathScore) AS AvgMath,
39     AVG(ScienceScore) AS AvgScience,
40     AVG(EnglishScore) AS AvgEnglish
41 FROM Students;
42
43 -- Top performer
44 SELECT Name,
45     (MathScore + ScienceScore + EnglishScore) AS TotalScore
46 FROM Students
47 ORDER BY TotalScore DESC
48 LIMIT 1;
49
50 -- Count students per grade
51 SELECT Grade, COUNT(*) AS TotalStudents
```

```
52 FROM Students
53 GROUP BY Grade;
54
55 -- Average score by gender
56 SELECT Gender,
57         AVG(MathScore) AS AvgMath,
58         AVG(ScienceScore) AS AvgScience,
59         AVG(EnglishScore) AS AvgEnglish
60 FROM Students
61 GROUP BY Gender;
62
63 -- Students with MathScore > 80
64 SELECT Name, MathScore
65 FROM Students
66 WHERE MathScore > 80;
67
68 -- Update student's grade
69 UPDATE Students
70 SET Grade = '11'
71 WHERE Name = 'Amit';
72
```

SQL Data Analysis Internship – Task 1

Student Management Database – Output Report

Output 1: All Student Details

ID	Name	Gender	Age	Grade	Math	Science	English
1	Amit	M	16	10	85	78	82
2	Neha	F	15	9	72	88	90
3	Rahul	M	17	11	91	86	89
4	Pooja	F	16	10	67	74	80
5	Karan	M	15	9	88	90	85
6	Sneha	F	17	11	92	91	93
7	Arjun	M	16	10	76	70	68
8	Riya	F	15	9	81	79	84
9	Vikas	M	17	11	69	65	72
10	Anjali	F	16	10	90	88	91

Output 2: Average Score in Each Subject

AvgMath	AvgScience	AvgEnglish
81.1	80.9	83.4

Output 3: Top Performer

Name	TotalScore
Sneha	276

Output 4: Students per Grade

Grade	TotalStudents
9	3
10	4
11	3

Output 5: Average Score by Gender

Gender	AvgMath	AvgScience	AvgEnglish
M	81.8	77.8	79.2
F	80.4	84.0	86.3

Output 6: Math Score > 80

Name	MathScore
Amit	85
Rahul	91
Karan	88
Sneha	92
Riya	81
Anjali	90

Output 7: Updated Grade Verification

Name	Grade
Amit	11