**SQL Developer Internship – Task 1**

1. **Database Setup**

CREATE DATABASE StudentManagement;

CREATE TABLE Students (

StudentID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(50),

Gender VARCHAR(1),

Age INT,

Grade VARCHAR(10),

MathScore INT,

ScienceScore INT,

EnglishScore INT

);

1. **Insert Sample Data**

INSERT INTO students(StudentID,Name,Gender,Age,Grade,MathScore,ScienceScore,EnglishScore) VALUES (101,'Reem Mulla','F',19,'A',89,92,96),

(102,'Sahil Shaikh','M',19,'B',85,81,80),

(103,'Sanika Patil','F',19,'A',92,92,97),

(104,'Radha Mane','F',19,'B',80,82,86),

(105,'Pooja Patil','F',19,'A',89,92,96),

(106,'Rakesh Mahajan','M',19,'A',91,92,92),

(107,'Satvik Chavan','M',19,'B',83,83,86),

(108,'Muskan Shaikh','F',19,'A',91,90,92),

(109,'Sana Nadaf','F',19,'A',89,92,91),

(110,'Shreya Tarade','F',19,'A',89,95,91);

1. **SQL Tasks**
2. **Display all students**

Query:

*SELECT \* FROM Students;*

1. **Average scores for each subject**

Query:

*SELECT*

*AVG(MathScore) AS AvgMathScore,*

*AVG(ScienceScore) AS AvgScienceScore,*

*AVG(EnglishScore) AS AvgEnglishScore*

*FROM students;*

1. **Find the student(s) with the highest total score across all subjects**

Query:

*SELECT StudentID, Name, (MathScore + ScienceScore + EnglishScore) AS TotalScore*

*FROM students ORDER BY TotalScore DESC LIMIT 1;*

1. **Count the number of students in each grade to observe grade distributions**

Query:

*SELECT Grade, COUNT(\*) AS GradeCount FROM students GROUP BY Grade;*

1. **Find the average score for male and female students to compare performance by gender**

Query:

*SELECT Gender,*

*AVG(MathScore) AS AverageMathScore,*

*AVG(ScienceScore) AS AverageScienceScore,*

*AVG(EnglishScore) AS AverageEnglishScore*

*FROM students GROUP BY Gender;*

1. **Identify students whose Math score is above 80 to highlight high achievers in Math.**

Query:

*SELECT \* FROM students WHERE MathScore > 80;*

1. **Update the grade of a student with a specific Student ID**

Query:

*UPDATE students SET Grade = 'B' WHERE StudentID = 108;*