Create a database named StudentManagement:-

mysql> create database StudentManagement;

Query OK, 1 row affected (0.03 sec)

Use the database:

mysql> use StudentManagement;

Database changed

Create table named Students:

mysql> create table Students(StudentID int PRIMARY KEY AUTO_INCREMENT,Name varchar(50),Gender varchar(1), Age int,Grade varchar(10),MathsScore int ,ScienceScore int ,EnglishScore int);

Query OK, 0 rows affected (0.06 sec)

mysql> desc Students;

ysql> desc Stud + Field		 Null	 Key	Default	 Extra
StudentID Name Gender Age Grade MathsScore EnglishScore	int varchar(50) varchar(1) int varchar(10) int int int int	NO	PRI	NULL NULL NULL NULL NULL NULL NULL NULL	auto_increment

Insert values into table:

mysql> insert into Students values(101,'Noah Lewis','F',14,'A',90,89,96);

Query OK, 1 row affected (0.04 sec)

mysql> insert into Students values(102,'Amit Kumar','M',15,'B',60,75,78);

```
mysql> insert into Students values(103, 'Gauri Rao', 'F', 14, 'A', 89, 85, 91);
Query OK, 1 row affected (0.00 sec)
mysql> insert into Students values(104, 'Manav Bhatt', 'M', 15, 'A', 93, 91, 89);
Query OK, 1 row affected (0.00 sec)
mysql> insert into Students values(105, 'Riya Kapoor', 'F', 15, 'C', 45, 56, 67);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Students values(106, John Doe', 'M', 15, 'B', 88, 78, 80);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Students values(107, 'Alice Johnson', 'F', 15, 'A', 90, 89, 87);
Query OK, 1 row affected (0.02 sec)
mysql> insert into Students values(108, 'Bob Williams', 'M',14, 'B',77,82,85);
Query OK, 1 row affected (0.02 sec)
mysql> insert into Students values(109, 'Jane Smith', 'M', 15, 'B', 83, 85, 90);
Query OK, 1 row affected (0.02 sec)
mysql> insert into Students values(110, 'Eisha Kaushik', 'F', 15, 'A', 90, 93, 89);
Query OK, 1 row affected (0.02 sec)
```

Query OK, 1 row affected (0.02 sec)

Tasks to be Perform

1)Display all students and their details to get an overview of the data:

mysql> select * from Students;

StudentID	Name .	Gender	Age	Grade	MathsScore	ScienceScore	EnglishScore
101	Noah Lewis	F	14	 A	90	89	96
102	Amit Kumar	M	15	В	60	75	78
103	Gauri Rao	F	14	Α	89	85	91
104	Manav Bhatt	M	15	Α	93	91	89
105	Riya Kapoor	F	15	C	45	56	67
106	John Doe	M	15	В	88	78	80
107	Alice Johnson	F	15	Α	90	89	87
108	Bob Williams	M	14	В	77	82	85
109	Jane Smith	M	15	В	83	85	90
110	Eisha Kaushik	F	15	Α	90	93	89

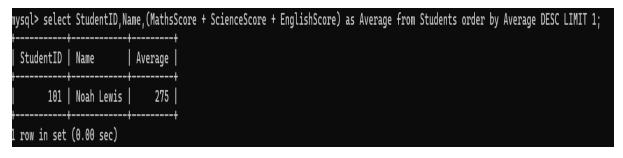
2) Calculate the average scores for each subject to understand subject-wise performance:-

mysql> select avg(MathsScore) as Average_MathsScore,avg(ScienceScore) as Average_ScienceScore,avg(EnglishScore) as Average_EnglishScore from Students;

ıysql> select avg(Matl	hsScore) as Average_Matl	nsScore,avg(ScienceScore) as Average_ScienceScore,avg(EnglishScore) as Average_EnglishScore from Students;
Average_MathsScore	Average_ScienceScore	Average_EnglishScore	
80.5000	82.3000	85.2000	
row in set (0.00 se	c)		

3) Find the student(s) with the highest total score across all subjects to identify the top performer:-

mysql> select StudentID,Name,(MathsScore + ScienceScore + EnglishScore) as Average from Students order by Average DESC LIMIT 1;



4) Count the number of students in each grade to observe grade distributions:-

mysql> select Grade,count(StudentID) as No_of_Students from Students group by Grade;

5) Find the average score for male and female students to compare performance by gender:-

mysql> select Gender,avg(MathsScore) as Average_Maths_Score,avg(ScienceScore) as Average_Science_Score,avg(EnglishScore) as Average_English_Score from Students group by Gender;

6) Identify students whose Math score is above 80 to highlight high achievers in Math:-

mysql> select StudentID,Name,MathsScore from Students where MathsScore > 80;

mysql> select	StudentID,Name	,MathsScore -	from	Students	where	MathsScore	>	80;
StudentID	Name	MathsScore	_+ -+					
101	Noah Lewis	90	i					
103	Gauri Rao	89						
104	Manav Bhatt	93						
106	John Doe	88						
107	Alice Johnson	90						
109	Jane Smith	83						
110	Eisha Kaushik	90						
++		+	-+					
7 rows in set	(0.01 sec)							

7) Update the grade of a student with a specific Student ID to reflect changes or corrections:-

mysql> update Students SET Grade = 'A+' where StudentID = 101;

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from Students where StudentID = 101;