**Question SET NO:4**

Tables

----------

CREATE TABLE Students (

StudentID INT PRIMARY KEY,

Name VARCHAR(100),

Gender VARCHAR(1),

Phone VARCHAR(100)

);

CREATE TABLE Marks (

StudentID INT,

Term VARCHAR(10),

Subject VARCHAR(50),

Mark INT,

FOREIGN KEY (StudentID) REFERENCES Students(StudentID)

);

DATA INSERTION

----------

INSERT INTO Students (StudentID, Name, Gender, Phone)

VALUES

(1, 'Rahul', 'M', '9847866777'),

(2, 'Anju', 'F', '3346897990'),

(3, 'Tom', 'M', '1223456689'),

(4, 'Reena', 'F', '786897891'),

(5, 'Suresh', 'M', '66784532678');



INSERT INTO Marks (StudentID, Term, Subject, Mark)

VALUES

(1, 'Term1', 'maths', 85),

(2, 'Term1', 'maths', 78),

(3, 'Term1', 'maths', 90),

(4, 'Term1', 'maths', 88),

(5, 'Term1', 'maths', 85),

(1, 'Term2', 'english', 75),

(2, 'Term2', 'english', 80),

(3, 'Term2', 'english', NULL),

(4, 'Term2', 'english', 85),

(5, 'Term2', 'english', 90);



REPORTS

------

**Q1 Student name and maths mark for term 1 for all students**

SELECT S.Name,M.Mark FROM Students S JOIN Marks M ON S.StudentID=M.StudentID WHERE M.Term='Term1' AND M.Subject ='maths';



**Q2:2. Student id and total marks of the student**

SELECT S.StudentID,SUM(M.Mark) AS TotalMarks FROM Students S JOIN Marks M ON S.StudentID=M.StudentID GROUP BY S.StudentID;



**Q3:3. Sudent details for all students whose name starts with S or has P in their name. Sort in ascending order of name**

SELECT \* FROM Students WHERE Name LIKE 'S%' OR NAME LIKE '%P%' ORDER BY NAME ASC;



**Q4:4. Student name and English mark for term 2 for all students. If mark is not there, show 'A' in the place of mark**

SELECT S.Name,ISNULL(CAST(M.Mark AS NVARCHAR), 'A') AS EnglishMark FROM Students S LEFT JOIN Marks M ON S.StudentID = M.StudentID AND M.Term = 'term2' AND M.Subject = 'english';



**Q5 5. Student id and total marks of the student for all boys**

SELECT S.StudentID,SUM(M.Mark) AS TotalMarks FROM Students S JOIN Marks M ON S.StudentID=M.StudentID WHERE S.Gender='M' GROUP BY S.StudentID;



**Q:6 6. Sudent details for all students whose has phone number and whose name starts with A. Sort in ascending order of name**

SELECT \* FROM Students WHERE Phone IS NOT NULL AND NAME LIKE 'A%' ORDER BY NAME ASC;



**Q:7 7. Student name and English mark for term 2 for all students. If mark is not there, show '0' in the place of mark**

SELECT S.Name, ISNULL(CAST(M.Mark AS NVARCHAR), '0') AS EnglishMark FROM Students S LEFT JOIN Marks M ON S.StudentID = M.StudentID AND M.Term = 'term2' AND M.Subject = 'english';



**Q:8 Sudent details for all boys who has the same mark for maths as 'Rahul'**

SELECT \* FROM STUDENTS S WHERE S.Gender='M' AND S.StudentID IN(SELECT M1.StudentID FROM Marks M1 JOIN Marks M2 ON M1.Mark=M2.Mark WHERE

M2.StudentID = (SELECT StudentID FROM Students WHERE Name = 'Rahul') AND M1.Subject = 'maths' AND M2.Subject = 'maths');

