-----Problem 1-----------

CREATE TABLE my\_table (

Id INT PRIMARY KEY IDENTITY(1,1),

Name CHAR(1)

);

INSERT INTO my\_table (Name)

VALUES ('A'),

('B'),

('C'),

('D'),

('E'),

('F'),

('G');

select \* from my\_table;

CREATE TABLE AttendanceRegister (

Id INT PRIMARY KEY IDENTITY(1,1),

EmployeeId INT,

Date DATE

);

INSERT INTO AttendanceRegister (EmployeeId, Date)

VALUES (1, '2021-01-01'),

(2, '2021-01-01'),

(5, '2021-01-01'),

(6, '2021-01-01'),

(2, '2021-01-02'),

(3, '2021-01-02'),

(4, '2021-01-02'),

(2, '2021-01-03'),

(3, '2021-01-03'),

(6, '2021-01-03'),

(9, '2021-01-23');

select \* from AttendanceRegister;

-- Find the number of days each employee has attended

SELECT EmployeeId, COUNT(DISTINCT Date) AS Attendance

FROM AttendanceRegister

GROUP BY EmployeeId;

-- Find the employee(s) with the maximum attendance

SELECT TOP 1 m.Name, a.Attendance

FROM my\_table m

JOIN (

SELECT EmployeeId, COUNT(DISTINCT Date) AS Attendance

FROM AttendanceRegister

GROUP BY EmployeeId

) a ON m.Id = a.EmployeeId

ORDER BY a.Attendance DESC;

-- Find the employee(s) with the minimum attendance

SELECT TOP 1 m.Name, a.Attendance

FROM my\_table m

JOIN (

SELECT EmployeeId, COUNT(DISTINCT Date) AS Attendance

FROM AttendanceRegister

GROUP BY EmployeeId

) a ON m.Id = a.EmployeeId

ORDER BY a.Attendance ASC;

-----Problem 2-------

CREATE TABLE employee\_attendance (

Date DATE,

Employee\_Name TEXT,

Status TEXT

);

INSERT INTO employee\_attendance (Date, Employee\_Name, Status)

VALUES

('2021-01-01', 'A', 'Present'),

('2021-01-01', 'B', 'Present'),

('2021-01-01', 'C', 'Absent'),

('2021-01-01', 'D', 'Absent'),

('2021-01-01', 'E', 'Present'),

('2021-01-01', 'F', 'Present'),

('2021-02-01', 'A', 'Absent'),

('2021-02-01', 'B', 'Present');

SELECT Date,

Employee\_Name,

CASE

WHEN COUNT(\*) OVER (PARTITION BY Date, Employee\_Name) > 1 THEN 'Present'

ELSE 'Absent'

END AS Status

FROM employee\_attendance

GROUP BY Date, Employee\_Name, Status

ORDER BY Date, Employee\_Name;