**SQL COMMANDS**

1. Create Database

CREATE DATABASE mphasis;

USE mphasis;

2. Create Tables

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100) NOT NULL

);

CREATE TABLE Employees (

EmployeeID INT PRIMARY KEY,

Name VARCHAR(100),

DepartmentID INT,

FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)

);

CREATE TABLE AttendanceRecords (

RecordID INT PRIMARY KEY AUTO\_INCREMENT,

EmployeeID INT,

ClockIn DATETIME,

ClockOut DATETIME,

AttendanceDate DATE,

FOREIGN KEY (EmployeeID) REFERENCES Employees(EmployeeID)

);

CREATE TABLE LeaveRequests (

LeaveID INT PRIMARY KEY AUTO\_INCREMENT,

EmployeeID INT,

LeaveDate DATE,

Reason VARCHAR(255),

Status VARCHAR(20),

FOREIGN KEY (EmployeeID) REFERENCES Employees(EmployeeID)

);

3. Insert Sample Data into Departments Detail

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1,’HR’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(2, ‘Java Developer’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(3, 'Data Analyst');

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(4, ‘Python Developer’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(5, ‘SQL’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(6, ‘Manager’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(7, ‘SQL’);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(8, ‘Data Analyst);

**4. Insert Sample Data into Employees Detail:**

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114701, ‘Priya’,24, 1);

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114702, ‘Selvi’,28, 2);

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114705, ‘Sandhiya’,25, 3);

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114706, ‘Lavanya’,20, 7);

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114707, ‘Kavitha’,30, 8);

INSERT INTO Employees (EmployeeID, Name,Age, DepartmentID) VALUES

(114709, 'Sheela',40, 5);

5. **Insert Sample Data into AttendanceRecords**

INSERT INTO AttendanceRecords (EmployeeID, ClockIn, ClockOut, AttendanceDate) VALUES

(114701, '2025-05-09 08:50:00', '2025-05-09 17:00:00', '2025-05-09'),

(114702, '2025-05-09 09:15:00', '2025-05-09 18:00:00', '2025-05-09'),

(114705, '2025-05-09 08:45:00', '2025-05-09 17:30:00', '2025-05-09'),

(114706, NULL, NULL, '2025-05-09'),

(114707, '2025-05-09 09:05:00', '2025-05-09 17:45:00', '2025-05-09');

6. **Insert Sample Data into LeaveRequests**

INSERT INTO LeaveRequests (EmployeeID, LeaveDate, Reason, Status) VALUES

(114701, '2025-04-15', 'Medical', 'Approved'),

(114702, '2025-04-20', 'Family Function', 'Approved'),

(114705, '2025-04-25', 'Vacation', 'Approved'),

(114706, '2025-05-01', 'Emergency', 'Approved'),

(114707, '2025-05-03', 'Sick', 'Pending'),

(114702, '2025-05-09', 'Personal Work', 'Approved');

7. **ALTER TABLE**

alter table Employees ADD AGE int after NAME;

8. **UPDATE Employee Record**

update employees set age=case

when employeeID=114706 then 17

else 30 end;

9. **Alter Table Constraints**

ALTER TABLE Employees

ADD CONSTRAINT chk\_age CHECK (Age >= 18);

**10. SHOW TABLES**

show tables;

**11. DESC EMPLOYEES**

DESC employees;

**12. JOINS**

SELECT D.DepartmentName, COUNT(E.EmployeeID) AS EmployeeCount

FROM Employees E

JOIN Departments D ON E.DepartmentID = D.DepartmentID

WHERE E.AGE > 18

GROUP BY D.DepartmentName having count(E.EmployeeID)>1;

**13. VIEW**

CREATE VIEW DailyAttendanceStatusView AS

SELECT

E.EmployeeID,

E.Name,

A.AttendanceDate,

A.ClockIn,

A.ClockOut,

CASE

WHEN A.ClockIn IS NULL THEN 'Absent'

ELSE 'Present'

END AS Status

FROM Employees E

LEFT JOIN AttendanceRecords A ON E.EmployeeID = A.EmployeeID;

select \* from DailyAttendanceStatusView;

14. **PROCEDURE**

CREATE PROCEDURE CountofLateEmployees2(IN checkdate DATE)

BEGIN

SELECT COUNT(\*) AS LateEmployees

FROM AttendanceRecords

WHERE AttendanceDate = checkdate AND TIME(ClockIn) > '07:00:00';

END //

DELIMITER ;

15. To call it

CALL CountofLateEmployees2('2025-05-09');