DROP TABLE IF EXISTS Employees;

DROP TABLE IF EXISTS Departments;

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100)

);

CREATE TABLE Employees (

EmployeeID INT PRIMARY KEY,

FirstName VARCHAR(50),

LastName VARCHAR(50),

DepartmentID INT,

Salary DECIMAL(10,2),

JoinDate DATE,

FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)

);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'HR'),

(2, 'Finance'),

(3, 'IT'),

(4, 'Marketing');

INSERT INTO Employees (EmployeeID, FirstName, LastName, DepartmentID, Salary, JoinDate) VALUES

(1, 'John', 'Doe', 1, 5000.00, '2020-01-15'),

(2, 'Jane', 'Smith', 2, 6000.00, '2019-03-22'),

(3, 'Michael', 'Johnson', 3, 7000.00, '2018-07-30'),

(4, 'Emily', 'Davis', 4, 5500.00, '2021-11-05');

DROP PROCEDURE IF EXISTS GetEmployeeCountByDepartment;

DROP PROCEDURE IF EXISTS GetTotalEmployeeCount;

DELIMITER //

CREATE PROCEDURE GetEmployeeCountByDepartment(IN dept\_id INT)

BEGIN

SELECT COUNT(\*) AS EmployeeCount

FROM Employees

WHERE DepartmentID = dept\_id;

END //

DELIMITER ;

DELIMITER //

CREATE PROCEDURE GetTotalEmployeeCount()

BEGIN

SELECT COUNT(\*) AS TotalEmployees

FROM Employees;

END //

DELIMITER ;

SELECT 'Total Employee Count:' AS Test;

CALL GetTotalEmployeeCount();

SELECT 'HR Department Employee Count:' AS Test;

CALL GetEmployeeCountByDepartment(1);

SELECT 'Finance Department Employee Count:' AS Test;

CALL GetEmployeeCountByDepartment(2);

SELECT 'IT Department Employee Count:' AS Test;

CALL GetEmployeeCountByDepartment(3);

SELECT 'Marketing Department Employee Count:' AS Test;

CALL GetEmployeeCountByDepartment(4);

SELECT 'Non-existent Department Employee Count:' AS Test;

CALL GetEmployeeCountByDepartment(99);

SELECT 'Departments Table:' AS TableInfo;

SELECT \* FROM Departments;

SELECT 'Employees Table:' AS TableInfo;

SELECT \* FROM Employees;

SELECT 'Complete Employee Summary:' AS Report;

SELECT

d.DepartmentID,

d.DepartmentName,

COUNT(e.EmployeeID) AS EmployeeCount

FROM Departments d

LEFT JOIN Employees e ON d.DepartmentID = e.DepartmentID

GROUP BY d.DepartmentID, d.DepartmentName

ORDER BY d.DepartmentID;

SELECT 'Direct Query - Total Employees:' AS DirectQuery;

SELECT COUNT(\*) AS TotalEmployees FROM Employees;

**Output :**

