**SQL Stored Procedure**

**Exercise 5:**

-- Drop existing tables if they exist

IF OBJECT\_ID('Employees', 'U') IS NOT NULL DROP TABLE Employees;

IF OBJECT\_ID('Departments', 'U') IS NOT NULL DROP TABLE Departments;

GO

-- Create Departments table

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100)

);

GO

-- Create Employees table

CREATE TABLE Employees (

EmployeeID INT PRIMARY KEY,

FirstName VARCHAR(50),

LastName VARCHAR(50),

DepartmentID INT FOREIGN KEY REFERENCES Departments(DepartmentID),

Salary DECIMAL(10,2),

JoinDate DATE

);

GO

-- Insert sample data into Departments

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'HR'),

(2, 'Finance'),

(3, 'IT'),

(4, 'Marketing'),

(5, 'Operations');

GO

-- Insert sample data into Employees

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'),

(5, 'Robert', 'Brown', 3, 7200.00, '2022-03-18'),

(6, 'Linda', 'Taylor', 2, 6100.00, '2020-06-10'),

(7, 'James', 'Wilson', 1, 4800.00, '2023-01-01'),

(8, 'Karen', 'Miller', 5, 5300.00, '2021-09-15'),

(9, 'David', 'Clark', 3, 7500.00, '2017-12-01'),

(10, 'Susan', 'Anderson', 4, 5600.00, '2019-08-20');

GO

-- Drop existing procedure if it exists

IF OBJECT\_ID('sp\_CountEmployeesByDepartment', 'P') IS NOT NULL

DROP PROCEDURE sp\_CountEmployeesByDepartment;

GO

-- Create stored procedure to count employees in a department

CREATE PROCEDURE sp\_CountEmployeesByDepartment

@DeptID INT

AS

BEGIN

SELECT

COUNT(\*) AS TotalEmployees

FROM Employees

WHERE DepartmentID = @DeptID;

END;

GO

-- Example: Execute the stored procedure for DepartmentID = 3 (IT)

EXEC sp\_CountEmployeesByDepartment @DeptID = 3;

