Lab Task 12

Stored Procedures, Triggers

1. **Stored Procedure:** Create a stored procedure named AddEmployee that takes the following parameters: @EmployeeID INT, @FirstName VARCHAR(50), @LastName VARCHAR(50), @DepartmentID INT. The procedure should insert a new employee record into the Employees table with the provided details.

2. **Trigger:** Create a trigger named UpdateDepartmentEmployeeCount that automatically updates the EmployeeCount column in the Departments table when a new employee is added. The trigger should increment the EmployeeCount by 1 for the corresponding department.

3. **Trigger:** Create a trigger named UpdateEmployeeSalary that automatically updates the Salary column in the Employees table when a new employee is added. The trigger should set the initial salary based on the department's default salary.

4. **Stored Procedure:** Create a stored procedure named RemoveEmployee that takes the following parameter: @EmployeeID INT. The procedure should delete the employee record from the Employees table based on the provided EmployeeID.

5. **Trigger:** Create a trigger named UpdateDepartmentEmployeeCountOnDelete that automatically updates the EmployeeCount column in the Departments table when an employee is removed. The trigger should decrement the EmployeeCount by 1 for the corresponding department.

6. **Stored Procedure:** Create a stored procedure named GetEmployeesByDepartment that takes the following parameter: @DepartmentID INT. The procedure should return a list of employees belonging to the specified department.

Instructions:

- Write the SQL code for each task and execute it in the SQL Server Management Studio (SSMS).
- Test the stored procedures and triggers by adding and removing employees from departments and checking the results.

Schema

```
-- Create Employees Table
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    FirstName VARCHAR(50),
    LastName VARCHAR(50),
    DepartmentID INT,
    Salary DECIMAL(10, 2)
);

-- Create Departments Table
CREATE TABLE Departments (
    DepartmentID INT PRIMARY KEY,
    DepartmentName VARCHAR(100),
    EmployeeCount INT
);

-- Insert Sample Data into Departments Table
INSERT INTO Departments (DepartmentID, DepartmentName, EmployeeCount)
VALUES
    (1, 'IT', 0),
    (2, 'HR', 0),
    (3, 'Finance', 0);:00');
```