Lab-56:

Assignment 1: Creating and Using Stored Procedures:

In this assignment, we need to create a stored procedure to manage the employee records in a database.

1. create a companyDB database first. Create a table named Employees which will have fields as EmployeeID(primary key), FirstName, LastName, Department and Salary.

```
--create table employee------
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY IDENTITY(1,1),
    FirstName NVARCHAR(50),
    LastName NVARCHAR(50),
    Department NVARCHAR(50),
    Salary DECIMAL(10, 2)
);
```

2. insert records into it:

```
-----insert sample data------------
INSERT INTO Employees (FirstName, LastName, Department, Salary)

    VALUES ('John', 'Doe', 'HR', 60000),
           ('Jane', 'Smith', 'IT', 80000),
           ('Sam', 'Brown', 'Finance', 75000);
```

	EmployeeID	FirstName	LastName	Department	Salary
1	1	John	Doe	HR	60000.00
2	2	Jane	Smith	IT	80000.00
3	3	Sam	Brown	Finance	75000.00

3. create a stored procedure to add a new employee record whenever we execute this store procedure. The procedure name will be AddEmployee , it will take parameters as: @FirstName NVARCHAR(50), @LastName NVARCHAR(50), @Department NVARCHAR(50), @Salary DECIMAL(10, 2) and a insert command to insert a record in an Employee table.

```
CREATE PROCEDURE AddEmployee
    @FirstName NVARCHAR(50),
    @LastName NVARCHAR(50),
    @Department NVARCHAR(50),
    @Salary DECIMAL(10, 2)

AS
BEGIN
    INSERT INTO Employees (FirstName, LastName, Department, Salary)
    VALUES (@FirstName, @LastName, @Department, @Salary);
END;
```

4. to execute the stored procedure we can write a query as:

```
execute stored procedure
EXEC AddEmployee 'Michael', 'Jordan', 'Marketing', 90000;
```

This will insert a new record into a Employee table. This is the output:

	EmployeeID	FirstName	LastName	Department	Salary
1	1	John	Doe	HR	60000.00
2	2	Jane	Smith	IT	80000.00
3	3	Sam	Brown	Finance	75000.00
4	4	Michael	Jordan	Marketing	90000.00
5	5	Michael	Jordan	Marketing	90000.00

5. create a stored procedure to retrieve the employees by the department name.

Create a procedure name GetEmployeesByDepartment and take a parameter as @Department NVARCHAR(50) to provide the department name.

Give a sql command to retrieve the employee record based upon the entered department name.

```
CREATE PROCEDURE GetEmployeesByDepartment
    @Department NVARCHAR(50)
AS
BEGIN
    SELECT * FROM Employees WHERE Department = @Department;
END;
```

6. execute the stored procedure by giving a department name.

```
EXEC GetEmployeesByDepartment 'IT';
```

This will execute the employee records which have IT as a department.

	EmployeeID	FirstName	LastName	Department	Salary
1	2	Jane	Smith	IT	80000.00