**WEEK – 2 Assignments**

**Advanced SQL**

**Mandatory hands-on :-**

**4. SQL Exercise Stored procedure**

**Exercise 1: Create a Stored Procedure**

Goal: Create a stored procedure to retrieve employee details by department.

Steps:

1. Define the stored procedure with a parameter for DepartmentID.

2. Write the SQL query to select employee details based on the DepartmentID.

3. Create a stored procedure named `sp\_InsertEmployee` with the following code:

CREATE PROCEDURE sp\_InsertEmployee

@FirstName VARCHAR(50),

@LastName VARCHAR(50),

@DepartmentID INT,

@Salary DECIMAL(10,2),

@JoinDate DATE

AS

BEGIN

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

VALUES (@FirstName, @LastName, @DepartmentID, @Salary, @JoinDate);

END;

**SQL Codes :-**

**Creating Tables :-**

| USE AdvSQL; GO  CREATE TABLE Departments (  DepartmentID INT PRIMARY KEY,  DepartmentName VARCHAR(100) );  CREATE TABLE Employees (  EmployeeID INT PRIMARY KEY IDENTITY(1,1),  FirstName VARCHAR(50),  LastName VARCHAR(50),  DepartmentID INT,  Salary DECIMAL(10,2),  JoinDate DATE,  FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID) ); |
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**Inserts Product :-**

| INSERT INTO Departments (DepartmentID, DepartmentName) VALUES (1, 'HR'), (2, 'Finance'), (3, 'IT'), (4, 'Marketing'); GO  INSERT INTO Employees (FirstName, LastName, DepartmentID, Salary, JoinDate) VALUES ('John', 'Doe', 1, 5000.00, '2020-01-15'), ('Jane', 'Smith', 2, 6000.00, '2019-03-22'), ('Michael', 'Johnson', 3, 7000.00, '2018-07-30'), ('Emily', 'Davis', 4, 5500.00, '2021-11-05'); GO  SELECT \* FROM Departments; SELECT \* FROM Employees; |
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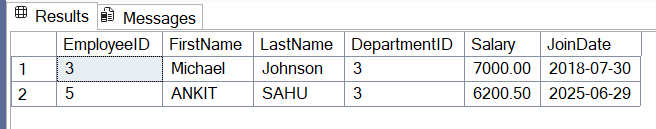
**Stored Procedure :-**

| CREATE PROCEDURE sp\_GetEmployeesByDepartment  @DepartmentID INT AS BEGIN  SELECT \*  FROM Employees  WHERE DepartmentID = @DepartmentID; END; GO  CREATE PROCEDURE sp\_InsertEmployee  @FirstName VARCHAR(50),  @LastName VARCHAR(50),  @DepartmentID INT,  @Salary DECIMAL(10,2),  @JoinDate DATE AS BEGIN  INSERT INTO Employees (FirstName, LastName, DepartmentID, Salary, JoinDate)  VALUES (@FirstName, @LastName, @DepartmentID, @Salary, @JoinDate); END; GO |
| --- |

**Get all IT employees :-**

| EXEC sp\_GetEmployeesByDepartment 3; |
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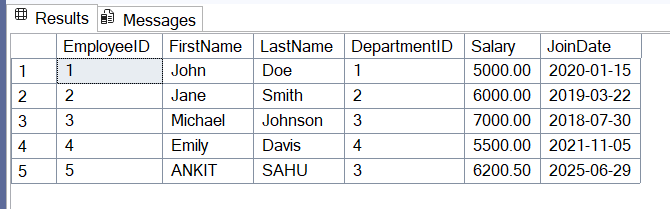
**OUTPUT :-**

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**Add new employee :-**

| EXEC sp\_InsertEmployee   @FirstName = 'ANKIT',   @LastName = 'SAHU',   @DepartmentID = 3,   @Salary = 6200.50,   @JoinDate = '2025-06-29'; |
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**OUTPUT :-**

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