

Lab56:

Create a stored procedure that uses both scalar and table-valued functions.

1. Modify Scalar Function to Include Bonus:

- create a scalar function named which will take salary as a parameter and returns a decimal value.
- @Salary DECIMAL(10, 2): This is an input parameter for the function. It specifies the salary.
- Declare a bonus variable @Bonus DECIMAL(10, 2) to store the calculated bonus.
- SET @Bonus = @Salary * 0.10- calculates the bonus as 10% of the salary and assigns it to the @Bonus variable.
- RETURN @Salary + @Bonus- this returns the total compensation which is the sum of salary and the bonus here.

```
CREATE FUNCTION CalculateTotalCompensation(@Salary DECIMAL(10, 2))
RETURNS DECIMAL(10, 2)
AS
BEGIN
    DECLARE @Bonus DECIMAL(10, 2);
    SET @Bonus = @Salary * 0.10; -- 10% bonus
    RETURN @Salary + @Bonus;
END;
```

2. Create a Stored Procedure to Retrieve High Earning Employees with Total Compensation:

Create a stored procedure named GetHighEarningEmployeesWithCompensation which will have two parameters as input @Department and @MinSalary which are required to pass while calling this function.

```
CREATE PROCEDURE GetHighEarningEmployeesWithCompensation
    @Department NVARCHAR(50), @MinSalary DECIMAL(10, 2)
AS
BEGIN
    SELECT e.EmployeeID, e.FirstName, e.LastName, e.Salary,
           dbo.CalculateTotalCompensation(e.Salary) AS TotalCompensation
    FROM dbo.GetHighEarningEmployees(@Department, @MinSalary) e;
END;
```

This SELECT statement retrieves columns (EmployeeID, FirstName, LastName, Salary) from the result set of the GetHighEarningEmployees function.

Pass the department as a parameter in a GetHighEarningEmployees (@Department, @MinSalary), this will call the function.

3. Execute the Stored Procedure:

```
| EXEC GetHighEarningEmployeesWithCompensation 'IT', 70000;
```

This command calls the GetHighEarningEmployeesWithCompensation stored procedure.

And passes IT and 7000 to the procedure parameter. As a result, it retrieves employees with a salary greater than 70000.

	EmployeeID	FirstName	LastName	Salary	TotalCompensation
1	2	Jane	Smith	80000.00	88000.00