**Scalar Functions**

**Aim :** Return a data from a scalar Function

**Goal:** Return the annual salary for a specific employee using `fn\_CalculateAnnualSalary`.

**Steps:**

1. Execute the `fn\_CalculateAnnualSalary` function for an employee with `EmployeeID = 1`.

2. Verify the result.

use [Employee Management schema]

go

-- Drop 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;

-- Create Departments table

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100)

);

-- 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

);

-- Insert sample data into Departments

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'HR'),

(2, 'IT'),

(3, 'Finance');

-- 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, 'Bob', 'Johnson', 3, 5500.00, '2021-07-01');

-- Drop function if it already exists

-- Drop the function if it already exists

IF OBJECT\_ID('dbo.GetEmployeeFullName', 'FN') IS NOT NULL

DROP FUNCTION dbo.GetEmployeeFullName;

GO

-- Now CREATE FUNCTION as the first statement in a new batch

CREATE FUNCTION dbo.GetEmployeeFullName

(

@EmpID INT

)

RETURNS VARCHAR(101)

AS

BEGIN

DECLARE @FullName VARCHAR(101);

SELECT @FullName = FirstName + ' ' + LastName

FROM Employees

WHERE EmployeeID = @EmpID;

RETURN @FullName;

END;

GO

-- Test by passing a specific EmployeeID

SELECT dbo.GetEmployeeFullName(2) AS FullName;

SELECT

EmployeeID,

dbo.GetEmployeeFullName(EmployeeID) AS FullName,

Salary

FROM Employees;

