**SQL Exercise - Functions**

**Exercise 7: Return Data from a Scalar Function**

**CODE:**

IF OBJECT\_ID('Departments', 'U') IS NOT NULL DROP TABLE Departments;

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100)

);

GO

IF OBJECT\_ID('Employees', 'U') IS NOT NULL DROP TABLE Employees;

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

);

GO

SELECT \* FROM Employees;

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'HR'),

(2, 'IT'),

(3, 'Finance');

GO

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');

GO

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

DROP FUNCTION dbo.fn\_GetAnnualSalary;

GO

CREATE FUNCTION dbo.fn\_GetAnnualSalary

(

@EmpID INT

)

RETURNS DECIMAL(12,2)

AS

BEGIN

DECLARE @AnnualSalary DECIMAL(12,2);

SELECT @AnnualSalary = Salary \* 12

FROM Employees

WHERE EmployeeID = @EmpID;

RETURN @AnnualSalary;

END;

GO

SELECT \* FROM sys.objects WHERE type = 'FN' AND name = 'fn\_GetAnnualSalary';

GO

-- Step 8: Execute the Function

SELECT dbo.fn\_GetAnnualSalary(1) AS AnnualSalary;

GO

* **OUTPUT**

