**Exercise 7: Packages**

**Scenario 2:**

**CODE:**

**-- Creating Employees Table**

CREATE TABLE Employees (

EmployeeID NUMBER PRIMARY KEY,

Name VARCHAR2(100),

Position VARCHAR2(50),

Salary NUMBER,

Department VARCHAR2(50),

HireDate DATE

);

**-- Inserting Values into Customers Table**

BEGIN

INSERT INTO Employees VALUES (1, 'Alice Johnson', 'Manager', 70000, 'HR', TO\_DATE('2015-06-15', 'YYYY-MM-DD'));

INSERT INTO Employees VALUES (2, 'Bob Brown', 'Developer', 60000, 'IT', TO\_DATE('2017-03-20', 'YYYY-MM-DD'));

INSERT INTO Employees VALUES (3, 'Carol Smith', 'Analyst', 55000, 'Finance', TO\_DATE('2018-09-10', 'YYYY-MM-DD'));

INSERT INTO Employees VALUES (4, 'David Lee', 'Tester', 52000, 'QA', TO\_DATE('2019-11-05', 'YYYY-MM-DD'));

INSERT INTO Employees VALUES (5, 'Esha Kumar', 'Team Lead', 68000, 'IT', TO\_DATE('2016-01-22', 'YYYY-MM-DD'));

END;

CREATE OR REPLACE PACKAGE EmployeeManagement AS

PROCEDURE HireEmployee(p\_EmpID IN NUMBER,p\_Name IN VARCHAR2,p\_JobTitle IN VARCHAR2,

p\_Salary IN NUMBER,p\_Department IN VARCHAR2,p\_HireDate IN DATE);

PROCEDURE UpdateEmployee(p\_EmpID IN NUMBER,p\_Name IN VARCHAR2,p\_JobTitle IN VARCHAR2,

p\_Salary IN NUMBER,p\_Department IN VARCHAR2);

FUNCTION CalculateAnnualSalary(p\_EmpID IN NUMBER) RETURN NUMBER;

END EmployeeManagement;

/

CREATE OR REPLACE PACKAGE BODY EmployeeManagement AS

PROCEDURE HireEmployee(p\_EmpID IN NUMBER,p\_Name IN VARCHAR2,p\_JobTitle IN VARCHAR2,p\_Salary IN NUMBER,

p\_Department IN VARCHAR2,p\_HireDate IN DATE) IS

BEGIN

INSERT INTO Employees (EmployeeID, Name, Position, Salary, Department, HireDate)

VALUES (p\_EmpID, p\_Name, p\_JobTitle, p\_Salary, p\_Department, p\_HireDate);

DBMS\_OUTPUT.PUT\_LINE('New employee hired successfully.');

END HireEmployee;

PROCEDURE UpdateEmployee(p\_EmpID IN NUMBER,p\_Name IN VARCHAR2,p\_JobTitle IN VARCHAR2,

p\_Salary IN NUMBER,p\_Department IN VARCHAR2) IS

BEGIN

UPDATE Employees

SET Name = p\_Name,

Position = p\_JobTitle,

Salary = p\_Salary,

Department = p\_Department

WHERE EmployeeID = p\_EmpID;

DBMS\_OUTPUT.PUT\_LINE('Employee details updated successfully.');

END UpdateEmployee;

FUNCTION CalculateAnnualSalary(p\_EmpID IN NUMBER) RETURN NUMBER IS

v\_Salary NUMBER;

BEGIN

SELECT Salary INTO v\_Salary FROM Employees WHERE EmployeeID = p\_EmpID;

RETURN v\_Salary \* 12;

END CalculateAnnualSalary;

END EmployeeManagement;

/

**-- Hire a new employee**

BEGIN

EmployeeManagement.HireEmployee(6, 'Tim Devid', 'HR Executive', 48000, 'HR', TO\_DATE('2022-04-10', 'YYYY-MM-DD'));

END;

/

**-- Update employee details**

BEGIN

EmployeeManagement.UpdateEmployee(6, 'Tom Cruse', 'Senior Developer', 70000, 'IT');

END;

/

**-- Calculate annual salary**

DECLARE

v\_annual\_salary NUMBER;

BEGIN

v\_annual\_salary := EmployeeManagement.CalculateAnnualSalary(2);

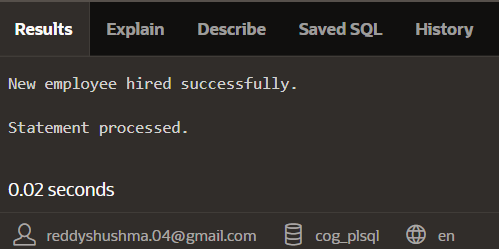
DBMS\_OUTPUT.PUT\_LINE('Annual Salary: ' || v\_annual\_salary);

END;

/

**OUTPUT:**

Output for **HireEmployee procedure** is:



Output for **UpdateEmployee procedure** is:

A screenshot of a computer

AI-generated content may be incorrect.

Output for **CalculateAnnualSalary function** is:

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AI-generated content may be incorrect.