**Exercise 7: Packages**

**Scenario 2:** Create a package to manage employee data.

* + **Question:** Write a package **EmployeeManagement** with procedures to hire new employees, update employee details, and a function to calculate annual salary.

ANS:

CREATE OR REPLACE PACKAGE EmployeeManagement AS

PROCEDURE HireNewEmployee(p\_employee\_id IN NUMBER, p\_name IN VARCHAR2, p\_position IN VARCHAR2, p\_salary IN NUMBER, p\_department IN VARCHAR2, p\_hire\_date IN DATE);

PROCEDURE UpdateEmployee(p\_employee\_id IN NUMBER, p\_name IN VARCHAR2, p\_position IN VARCHAR2, p\_salary IN NUMBER, p\_department IN VARCHAR2);

FUNCTION CalculateAnnualSalary(p\_employee\_id IN NUMBER) RETURN NUMBER;

END EmployeeManagement;

/

CREATE OR REPLACE PACKAGE BODY EmployeeManagement AS

PROCEDURE HireNewEmployee(p\_employee\_id IN NUMBER, p\_name IN VARCHAR2, p\_position IN VARCHAR2, p\_salary IN NUMBER, p\_department IN VARCHAR2, p\_hire\_date IN DATE) IS

BEGIN

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

VALUES (p\_employee\_id, p\_name, p\_position, p\_salary, p\_department, p\_hire\_date);

COMMIT;

END HireNewEmployee;

PROCEDURE UpdateEmployee(p\_employee\_id IN NUMBER, p\_name IN VARCHAR2, p\_position IN VARCHAR2, p\_salary IN NUMBER, p\_department IN VARCHAR2) IS

BEGIN

UPDATE Employees

SET Name = p\_name, Position = p\_position, Salary = p\_salary, Department = p\_department

WHERE EmployeeID = p\_employee\_id;

COMMIT;

END UpdateEmployee;

FUNCTION CalculateAnnualSalary(p\_employee\_id IN NUMBER) RETURN NUMBER IS

v\_salary NUMBER;

BEGIN

SELECT Salary INTO v\_salary

FROM Employees

WHERE EmployeeID = p\_employee\_id;

RETURN v\_salary \* 12;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

RETURN 0;

END CalculateAnnualSalary;

END EmployeeManagement;