**WEEK-2 PL/SQL**

**Exercise 3: Stored Procedures**.

**Prerequisite Tables**

-- Accounts Table

CREATE TABLE Accounts (

AccountID NUMBER PRIMARY KEY,

CustomerID NUMBER,

AccountType VARCHAR2(20), -- e.g., 'Savings'

Balance NUMBER

);

-- Employees Table

CREATE TABLE Employees (

EmployeeID NUMBER PRIMARY KEY,

Name VARCHAR2(50),

Department VARCHAR2(50),

Salary NUMBER

);  
 **Scenario 1: Process Monthly Interest for Savings Accounts**

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest IS

BEGIN

FOR rec IN (

SELECT AccountID, Balance FROM Accounts WHERE AccountType = 'Savings'

) LOOP

UPDATE Accounts

SET Balance = rec.Balance + (rec.Balance \* 0.01)

WHERE AccountID = rec.AccountID;

DBMS\_OUTPUT.PUT\_LINE('Updated AccountID ' || rec.AccountID ||

': New Balance = ' || TO\_CHAR(rec.Balance + (rec.Balance \* 0.01)));

END LOOP;

END;

/

OUTPUT



**Scenario 2: Bonus for Employees Based on Department**

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus (

p\_department IN VARCHAR2,

p\_bonus\_pct IN NUMBER

) IS

BEGIN

FOR rec IN (

SELECT EmployeeID, Salary FROM Employees WHERE Department = p\_department

) LOOP

UPDATE Employees

SET Salary = rec.Salary + (rec.Salary \* p\_bonus\_pct / 100)

WHERE EmployeeID = rec.EmployeeID;

DBMS\_OUTPUT.PUT\_LINE('Bonus applied to EmployeeID ' || rec.EmployeeID ||

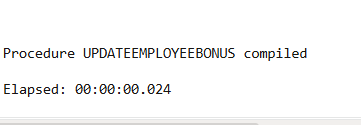
': New Salary = ' || TO\_CHAR(rec.Salary + (rec.Salary \* p\_bonus\_pct / 100)));

END LOOP;

END;

/

**OUTPUT**

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**Scenario 3: Transfer Funds Between Accounts**

CREATE OR REPLACE PROCEDURE TransferFunds (

p\_from\_account IN NUMBER,

p\_to\_account IN NUMBER,

p\_amount IN NUMBER

) IS

v\_from\_balance NUMBER;

BEGIN

-- Get balance of source account

SELECT Balance INTO v\_from\_balance FROM Accounts WHERE AccountID = p\_from\_account;

IF v\_from\_balance < p\_amount THEN

DBMS\_OUTPUT.PUT\_LINE('Insufficient funds in source account.');

ELSE

-- Deduct from source

UPDATE Accounts

SET Balance = Balance - p\_amount

WHERE AccountID = p\_from\_account;

-- Add to destination

UPDATE Accounts

SET Balance = Balance + p\_amount

WHERE AccountID = p\_to\_account;

DBMS\_OUTPUT.PUT\_LINE('Transferred ' || p\_amount ||

' from AccountID ' || p\_from\_account ||

' to AccountID ' || p\_to\_account);

END IF;

END;

/

OUTPUT

