**Exercise 3: Stored Procedures**

**Scenario 1: The bank needs to process monthly interest for all savings accounts.**

*create or replace Procedure ProcessMonthlyInterest(*

*balance IN number*

*)is*

*begin*

*update Accounts*

*SET Balance = Balance+Balance\*0.01*

*WHERE AccountType = 'Savings';*

*end;*

**Scenario 2:** The bank wants to implement a bonus scheme for employees based on their performance.

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus(

dept\_name IN VARCHAR2,

bonus\_percent IN NUMBER

) IS

BEGIN

UPDATE Employees

SET Salary = Salary + (Salary \* bonus\_percent / 100)

WHERE Department = dept\_name;

COMMIT;

END;

EXEC UpdateEmployeeBonus('IT', 10);

**Scenario 3: Customers should be able to transfer funds between their accounts**.

*create or replace procedure TransferFunds(*

*from\_account IN number,*

*to\_account IN number,*

*amount IN number*

*)is*

*v\_balance number;*

*begin*

*select balance into v\_balance*

*from Accounts*

*where accountid = from\_account*

*for update;*

*if v\_balance<amount then*

*RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient Balance');*

*end if;*

*update Accounts*

*set balance = balance - amount, lastModified = sysdate*

*where accountid = from\_account;*

*update Accounts*

*set balance = balance + amount, lastModified = sysdate*

*where accountid = to\_account;*

*end;*

declare

from\_account number:=1;

to\_account number:=2;

amount number:=200;

begin

TransferFunds(from\_account, to\_account, amount);

dbms\_output.put\_line('done ');

end;

* Anonymous block to test the procedure

DECLARE

from\_account NUMBER := 1;

to\_account NUMBER := 2;

amount NUMBER := 200;

BEGIN

TransferFunds(from\_account, to\_account, amount);

DBMS\_OUTPUT.PUT\_LINE('Transfer completed successfully.');

END;