**Question – 3**

Scenario 3: Group all account-related operations into a package.

o Question: Create a package AccountOperations with procedures for opening a new account, closing an account, and a function to get the total balance of a customer across all accounts.

PL/SQL Code ---

CREATE OR REPLACE PACKAGE AccountOperations AS

-- Procedure to open a new account

PROCEDURE OpenAccount(p\_customerid NUMBER, p\_accounttype VARCHAR2, p\_balance NUMBER);

-- Procedure to close an account

PROCEDURE CloseAccount(p\_accountid NUMBER);

-- Function to get total balance of a customer

FUNCTION GetTotalBalance(p\_customerid NUMBER) RETURN NUMBER;

END AccountOperations;

/

CREATE OR REPLACE PACKAGE BODY AccountOperations AS

PROCEDURE OpenAccount(p\_customerid NUMBER, p\_accounttype VARCHAR2, p\_balance NUMBER) IS

BEGIN

INSERT INTO Accounts (CUSTOMERID, ACCOUNTTYPE, BALANCE, LASTMODIFIED)

VALUES (p\_customerid, p\_accounttype, p\_balance, SYSDATE);

END OpenAccount;

PROCEDURE CloseAccount(p\_accountid NUMBER) IS

BEGIN

DELETE FROM Accounts

WHERE ACCOUNTID = p\_accountid;

END CloseAccount;

FUNCTION GetTotalBalance(p\_customerid NUMBER) RETURN NUMBER IS

v\_total\_balance NUMBER;

BEGIN

SELECT SUM(BALANCE) INTO v\_total\_balance

FROM Accounts

WHERE CUSTOMERID = p\_customerid;

RETURN v\_total\_balance;

END GetTotalBalance;

END AccountOperations;

/

--Test the Package

BEGIN

AccountOperations.OpenAccount(1, 'Checking', 5000);

DBMS\_OUTPUT.PUT\_LINE('Account opened successfully.');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

/

SET SERVEROUT ON;

BEGIN

AccountOperations.CloseAccount(1);

DBMS\_OUTPUT.PUT\_LINE('Account closed successfully.');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

/

-- Test getting total balance of a customer

DECLARE

v\_total\_balance NUMBER;

BEGIN

v\_total\_balance := AccountOperations.GetTotalBalance(1);

DBMS\_OUTPUT.PUT\_LINE('Total balance: ' || v\_total\_balance);

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

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