**Question – 1**

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

* Question: Write a stored procedure ProcessMonthlyInterest that calculates and updates the balance of all savings accounts by applying an interest rate of 1% to the current balance.

PL/SQL Code –

SET SERVEROUT ON;

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest AS

CURSOR savings\_accounts IS

SELECT AccountID, Balance

FROM Accounts

WHERE AccountType = 'Savings';

v\_interest\_rate CONSTANT NUMBER := 0.01; -- 1% interest rate

BEGIN

FOR acc IN savings\_accounts LOOP

UPDATE Accounts

SET Balance = Balance + (Balance \* v\_interest\_rate),

LastModified = SYSDATE

WHERE AccountID = acc.AccountID;

END LOOP;

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Monthly interest processed for all savings accounts.');

EXCEPTION

WHEN OTHERS THEN

ROLLBACK;

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

END ProcessMonthlyInterest;

/

BEGIN

ProcessMonthlyInterest;

END;

/

-- Verifying the data

SELECT \* FROM Accounts WHERE AccountType = 'Savings';