**Question – 3**

Scenario 3: Check if a customer has sufficient balance before making a transaction.

* Question: Write a function HasSufficientBalance that takes an account ID and an amount as input and returns a boolean indicating whether the account has at least the specified amount.

PL/SQL Code –

CREATE OR REPLACE FUNCTION HasSufficientBalance (

p\_AccountID IN ACCOUNTS.ACCOUNTID%TYPE,

p\_Amount IN NUMBER

) RETURN BOOLEAN IS

v\_Balance ACCOUNTS.BALANCE%TYPE;

BEGIN

-- Get the balance of the specified account

SELECT BALANCE INTO v\_Balance

FROM ACCOUNTS

WHERE ACCOUNTID = p\_AccountID;

-- Check if the balance is greater than or equal to the specified amount

IF v\_Balance >= p\_Amount THEN

RETURN TRUE;

ELSE

RETURN FALSE;

END IF;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

-- If the account does not exist, return FALSE

RETURN FALSE;

END;

SET SERVEROUT ON;

DECLARE

v\_AccountID ACCOUNTS.ACCOUNTID%TYPE;

v\_Amount NUMBER := 1000; -- Example amount to check

v\_HasSufficientBalance BOOLEAN;

BEGIN

FOR account IN (SELECT ACCOUNTID, BALANCE FROM ACCOUNTS) LOOP

v\_AccountID := account.ACCOUNTID;

-- Call the function

v\_HasSufficientBalance := HasSufficientBalance(v\_AccountID, v\_Amount);

-- Displaying the result

DBMS\_OUTPUT.PUT\_LINE('Account ID: ' || v\_AccountID ||

', Balance: ' || account.BALANCE ||

', Has sufficient balance for ' || v\_Amount || ': ' ||

CASE WHEN v\_HasSufficientBalance THEN 'YES' ELSE 'NO' END);

END LOOP;

END;