**Question – 3**

Scenario 3: Ensure data integrity when adding a new customer.

* Question: Write a stored procedure AddNewCustomer that inserts a new customer into the Customers table. If a customer with the same ID already exists, handle the exception by logging an error and preventing the insertion.

PL/SQL Code –

CREATE OR REPLACE PROCEDURE AddNewCustomer (

p\_CustomerID IN Customers.CustomerID%TYPE,

p\_Name IN Customers.Name%TYPE,

p\_DOB IN Customers.DOB%TYPE,

p\_Balance IN Customers.Balance%TYPE

) IS

BEGIN

-- Insert new customer

INSERT INTO Customers (CustomerID, Name, DOB, Balance, LastModified)

VALUES (p\_CustomerID, p\_Name, p\_DOB, p\_Balance, SYSDATE);

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Customer added successfully with Customer ID: ' || p\_CustomerID);

EXCEPTION

WHEN DUP\_VAL\_ON\_INDEX THEN

DBMS\_OUTPUT.PUT\_LINE('Error: Customer ID ' || p\_CustomerID || ' already exists.');

ROLLBACK;

WHEN OTHERS THEN

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

ROLLBACK;

END AddNewCustomer;

/

SET SERVEROUTPUT ON;

BEGIN

AddNewCustomer(3, 'Michael Johnson', TO\_DATE('1982-09-17', 'YYYY-MM-DD'), 20000);

END;

/

BEGIN

AddNewCustomer(6, 'Sarah Williams', TO\_DATE('1975-11-23', 'YYYY-MM-DD'), 25600);

END;

/