**Exercise 4: Triggers**

**Scenario 1:**

**CODE:**

***-- Creating Customers Table***

CREATE TABLE Customers (

CustomerID NUMBER PRIMARY KEY,

Name VARCHAR2(100),

DOB DATE,

Balance NUMBER,

LastModified DATE

);

***-- Inserting Values into Customers Table***

BEGIN

INSERT INTO Customers VALUES (1, 'Alice Reddy', TO\_DATE('1950-05-10', 'YYYY-MM-DD'), 12000, SYSDATE-10);

INSERT INTO Customers VALUES (2, 'Bob Singh', TO\_DATE('1990-08-21', 'YYYY-MM-DD'), 8000, SYSDATE-20);

INSERT INTO Customers VALUES (3, 'Carol Mehta', TO\_DATE('1962-01-15', 'YYYY-MM-DD'), 15000, SYSDATE-12);

INSERT INTO Customers VALUES (4, 'David Rao', TO\_DATE('1985-12-01', 'YYYY-MM-DD'), 9500, SYSDATE-20);

INSERT INTO Customers VALUES (5, 'Esha Iyer', TO\_DATE('1945-03-25', 'YYYY-MM-DD'), 20000, SYSDATE-23);

END;

***-- Trigger to update LastModified and print old/new values***

CREATE OR REPLACE TRIGGER UpdateCustomerLastModified

BEFORE UPDATE

ON Customers

FOR EACH ROW

BEGIN

DBMS\_OUTPUT.PUT\_LINE('--- Updating Customer Record ---');

DBMS\_OUTPUT.PUT\_LINE('CustomerID: ' || :OLD.CustomerID);

DBMS\_OUTPUT.PUT\_LINE('Old Name : ' || :OLD.Name);

DBMS\_OUTPUT.PUT\_LINE('New Name : ' || :NEW.Name);

DBMS\_OUTPUT.PUT\_LINE('Old LastMod : ' || TO\_CHAR(:OLD.LastModified, 'YYYY-MM-DD HH24:MI:SS'));

DBMS\_OUTPUT.PUT\_LINE('New LastMod : ' || TO\_CHAR(SYSDATE, 'YYYY-MM-DD HH24:MI:SS'));

:NEW.LastModified:=SYSDATE;

END;

/

UPDATE Customers

SET NAME='Bob Reddy'

WHERE CustomerID=2;

**OUTPUT:**

