Name: Vishal R.

Super set ID: 6413500

**Scenario – 1:**

BEGIN

    EXECUTE IMMEDIATE 'DROP TABLE CUSTOMERS';

EXCEPTION

    WHEN OTHERS THEN NULL;

END;

/

CREATE TABLE CUSTOMERS (

    CUSTOMER\_ID     NUMBER PRIMARY KEY,

    NAME            VARCHAR2(100),

    DOB             DATE,

    LOAN\_INTEREST   NUMBER(5,2)

);

INSERT INTO CUSTOMERS VALUES (1, 'John Smith', TO\_DATE('1950-03-10', 'YYYY-MM-DD'), 8.50);

INSERT INTO CUSTOMERS VALUES (2, 'Alice Johnson', TO\_DATE('1980-07-15', 'YYYY-MM-DD'), 7.75);

INSERT INTO CUSTOMERS VALUES (3, 'Robert Lee', TO\_DATE('1945-12-01', 'YYYY-MM-DD'), 9.00);

COMMIT;

SET SERVEROUTPUT ON;

BEGIN

    FOR cust\_rec IN (

        SELECT CUSTOMER\_ID, DOB, LOAN\_INTEREST

        FROM CUSTOMERS

    )

    LOOP

        DECLARE

            v\_age NUMBER;

        BEGIN

            v\_age := TRUNC(MONTHS\_BETWEEN(SYSDATE, cust\_rec.DOB) / 12);

            IF v\_age > 60 THEN

                UPDATE CUSTOMERS

                SET LOAN\_INTEREST = cust\_rec.LOAN\_INTEREST - 1

                WHERE CUSTOMER\_ID = cust\_rec.CUSTOMER\_ID;

                DBMS\_OUTPUT.PUT\_LINE('Discount applied to Customer ID: ' || cust\_rec.CUSTOMER\_ID);

            END IF;

        END;

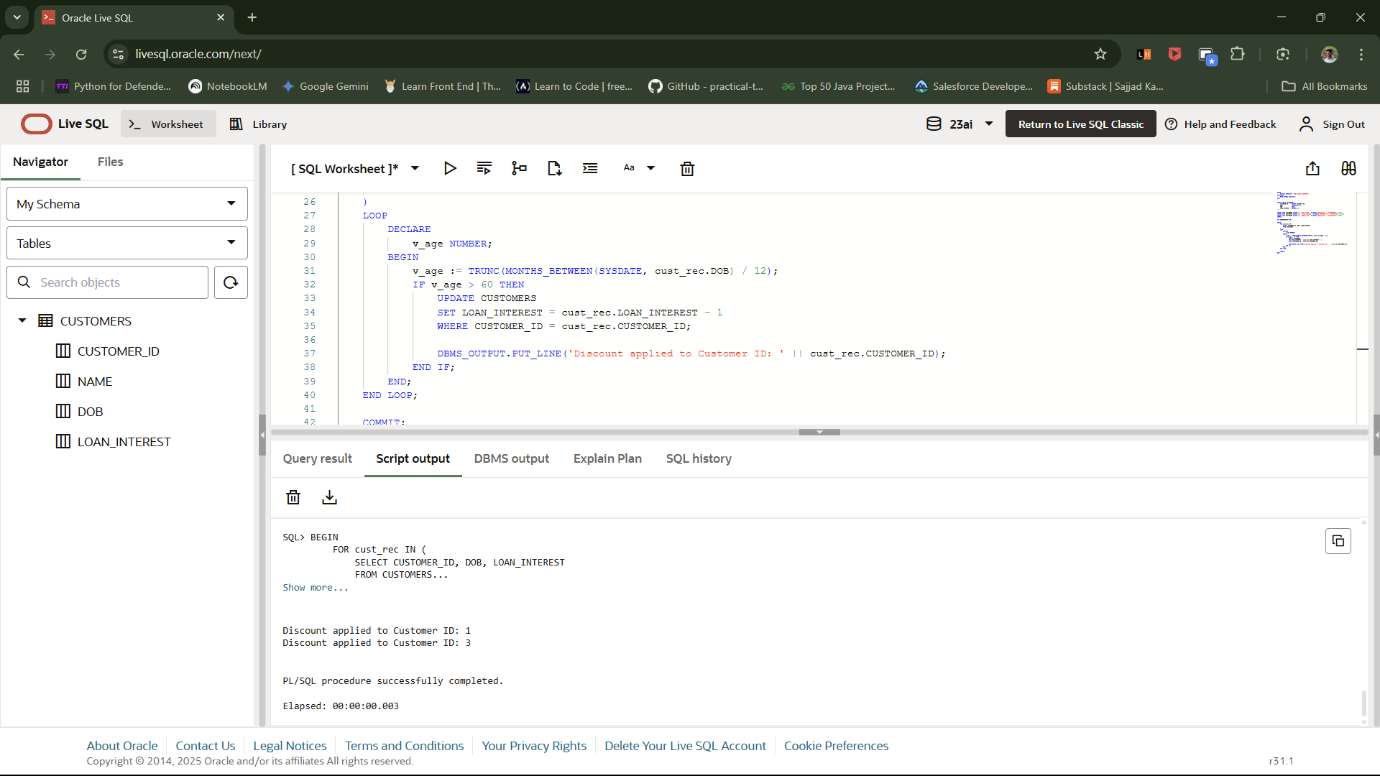
    END LOOP;

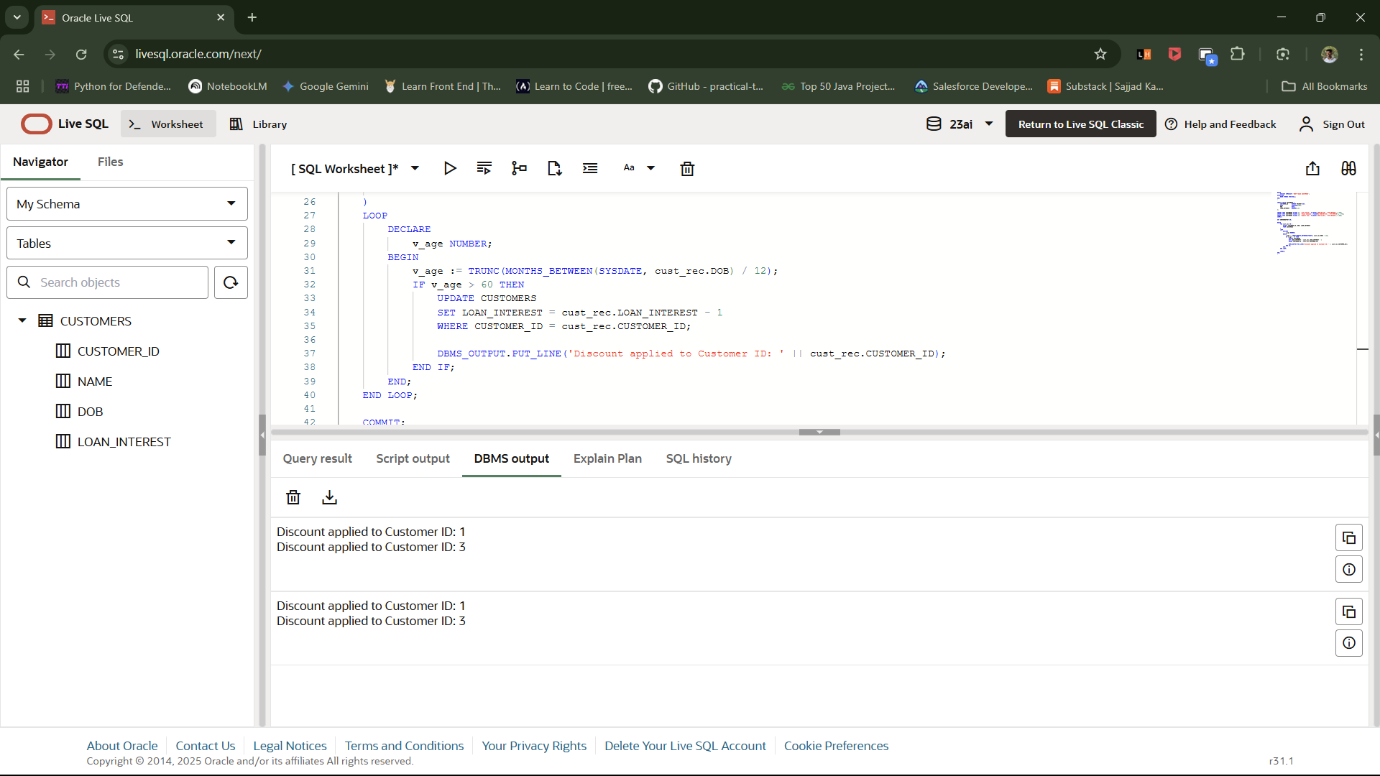
    COMMIT;

END;

/

OUTPUT:

****

****

**Scenario – 2:**

SET SERVEROUTPUT ON;

CREATE TABLE CUSTOMERS (

    CUSTOMER\_ID   NUMBER PRIMARY KEY,

    NAME          VARCHAR2(100),

    BALANCE       NUMBER(12,2),

    ISVIP         CHAR(1) DEFAULT 'N'

);

BEGIN

    EXECUTE IMMEDIATE 'DROP TABLE CUSTOMERS';

EXCEPTION

    WHEN OTHERS THEN

        IF SQLCODE != -942 THEN

            RAISE;

        END IF;

END;

/

BEGIN

    INSERT INTO CUSTOMERS VALUES (1, 'John Smith', 8500.00, 'N');

    INSERT INTO CUSTOMERS VALUES (2, 'Alice Johnson', 12500.00, 'N');

    INSERT INTO CUSTOMERS VALUES (3, 'Robert Lee', 20000.00, 'N');

    INSERT INTO CUSTOMERS VALUES (4, 'Emily Clark', 9900.00, 'N');

    COMMIT;

END;

/

BEGIN

    FOR cust\_rec IN (

        SELECT CUSTOMER\_ID, BALANCE

        FROM CUSTOMERS

    )

    LOOP

        IF cust\_rec.BALANCE > 10000 THEN

            UPDATE CUSTOMERS

            SET ISVIP = 'Y'

            WHERE CUSTOMER\_ID = cust\_rec.CUSTOMER\_ID;

            DBMS\_OUTPUT.PUT\_LINE('Promoted to VIP: Customer ID = ' || cust\_rec.CUSTOMER\_ID);

        END IF;

    END LOOP;

    COMMIT;

END;

/

BEGIN

    FOR rec IN (SELECT \* FROM CUSTOMERS) LOOP

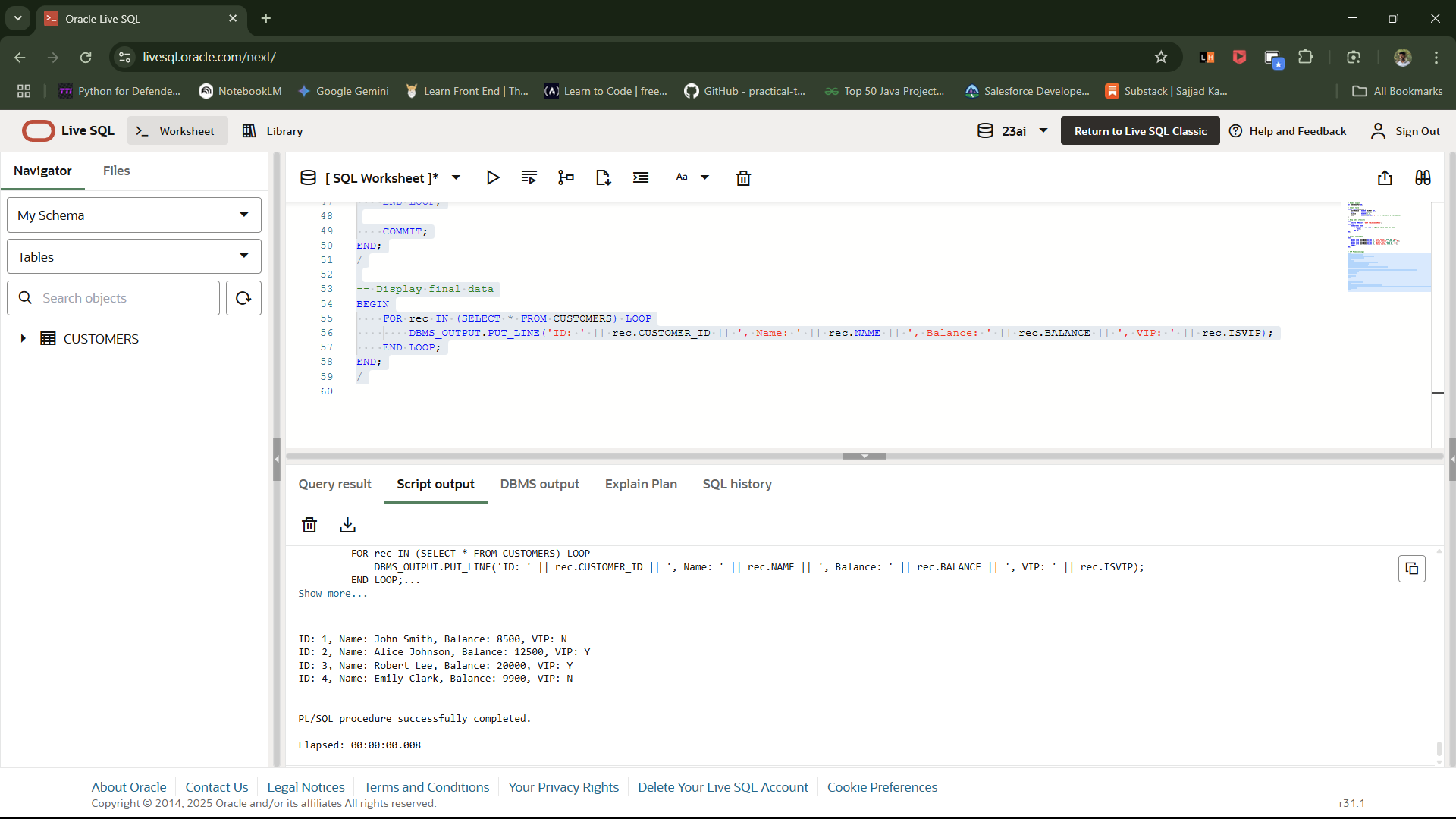
        DBMS\_OUTPUT.PUT\_LINE('ID: ' || rec.CUSTOMER\_ID || ', Name: ' || rec.NAME || ', Balance: ' || rec.BALANCE || ', VIP: ' || rec.ISVIP);

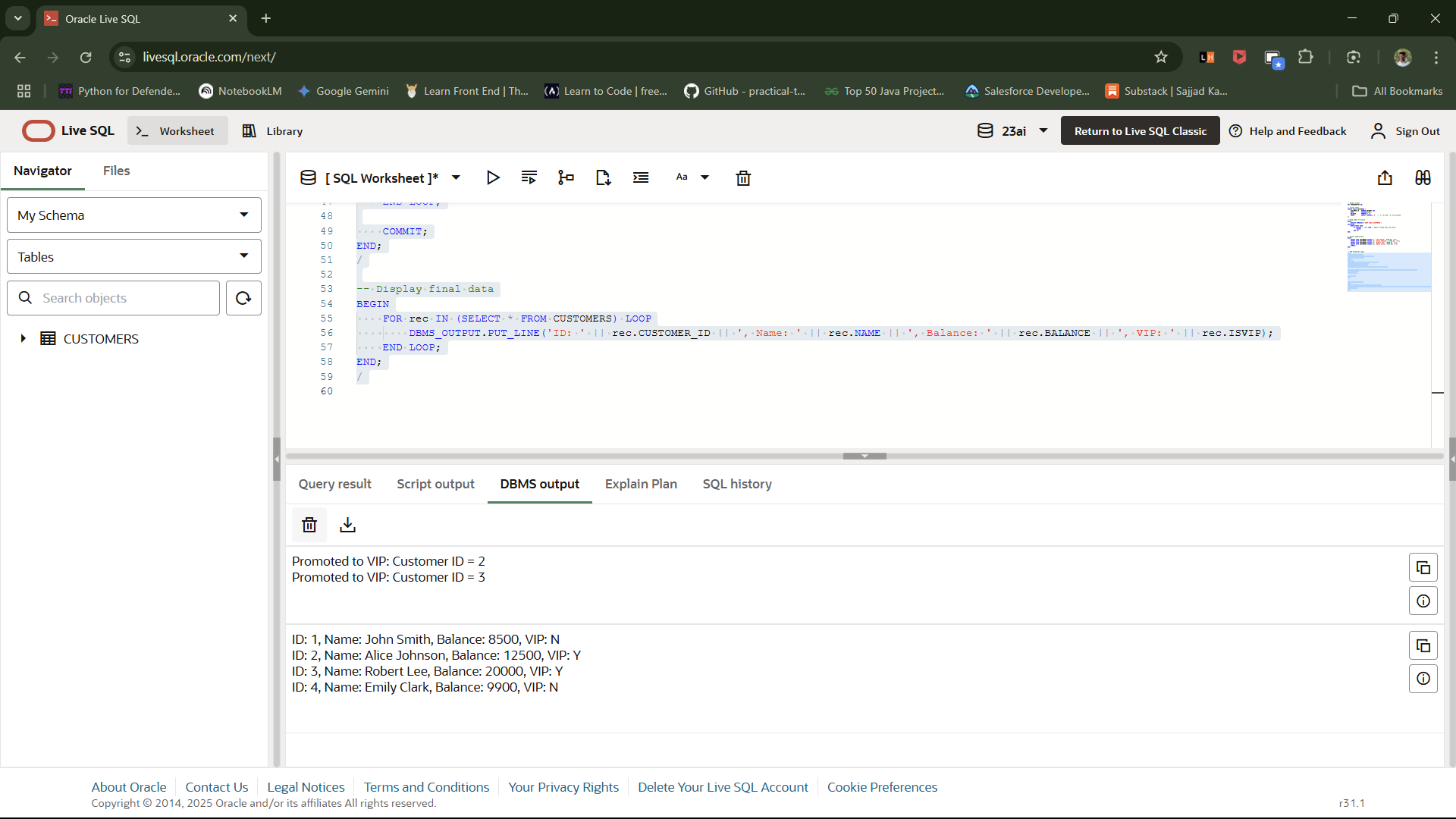
    END LOOP;

END;

/

OUTPUT:





**Scenario – 3:**

SET SERVEROUTPUT ON;

BEGIN

    EXECUTE IMMEDIATE 'DROP TABLE LOANS';

EXCEPTION

    WHEN OTHERS THEN

        IF SQLCODE != -942 THEN RAISE; END IF;

END;

/

BEGIN

    EXECUTE IMMEDIATE 'DROP TABLE CUSTOMERS';

EXCEPTION

    WHEN OTHERS THEN

        IF SQLCODE != -942 THEN RAISE; END IF;

END;

/

CREATE TABLE CUSTOMERS (

    CUSTOMER\_ID   NUMBER PRIMARY KEY,

    NAME          VARCHAR2(100)

);

CREATE TABLE LOANS (

    LOAN\_ID        NUMBER PRIMARY KEY,

    CUSTOMER\_ID    NUMBER,

    DUE\_DATE       DATE,

    AMOUNT         NUMBER(12,2),

    CONSTRAINT fk\_customer FOREIGN KEY (CUSTOMER\_ID) REFERENCES CUSTOMERS(CUSTOMER\_ID)

);

BEGIN

    INSERT INTO CUSTOMERS VALUES (1, 'John Smith');

    INSERT INTO CUSTOMERS VALUES (2, 'Alice Johnson');

    INSERT INTO CUSTOMERS VALUES (3, 'Robert Lee');

    INSERT INTO CUSTOMERS VALUES (4, 'Emily Clark');

    COMMIT;

END;

/

BEGIN

    INSERT INTO LOANS VALUES (101, 1, SYSDATE + 5, 5000.00);   -- due soon

    INSERT INTO LOANS VALUES (102, 2, SYSDATE + 15, 10000.00); -- due soon

    INSERT INTO LOANS VALUES (103, 3, SYSDATE + 40, 15000.00); -- not due

    INSERT INTO LOANS VALUES (104, 4, SYSDATE + 29, 7500.00);  -- due soon

    COMMIT;

END;

/

BEGIN

    FOR loan\_rec IN (

        SELECT L.LOAN\_ID, L.CUSTOMER\_ID, L.DUE\_DATE, L.AMOUNT, C.NAME

        FROM LOANS L

        JOIN CUSTOMERS C ON L.CUSTOMER\_ID = C.CUSTOMER\_ID

        WHERE L.DUE\_DATE BETWEEN SYSDATE AND SYSDATE + 30

    )

    LOOP

        DBMS\_OUTPUT.PUT\_LINE(

            'Reminder: Loan ID ' || loan\_rec.LOAN\_ID ||

            ', Amount: $' || loan\_rec.AMOUNT ||

            ', Due Date: ' || TO\_CHAR(loan\_rec.DUE\_DATE, 'DD-Mon-YYYY') ||

            ', Customer: ' || loan\_rec.NAME

        );

    END LOOP;

END;

/

OUTPUT:

