Exercise 1-

Scenario 1:

DECLARE

CURSOR customer\_cursor IS

SELECT c.CustomerID, l.LoanID, l.InterestRate

FROM Customers c

JOIN Loans l ON c.CustomerID = l.CustomerID

WHERE EXTRACT(YEAR FROM SYSDATE) - EXTRACT(YEAR FROM c.DOB) > 60;

BEGIN

FOR loan\_record IN customer\_cursor LOOP

UPDATE Loans

SET InterestRate = InterestRate - 1

WHERE LoanID = loan\_record.LoanID;

DBMS\_OUTPUT.PUT\_LINE('Applied 1% discount to loan ID: ' || loan\_record.LoanID);

END LOOP;

COMMIT;

END;

Scenario 2:

ALTER TABLE Customers ADD (IsVIP BOOLEAN(FALSE));

DECLARE

CURSOR customer\_cursor IS

SELECT CustomerID, Balance

FROM Customers;

BEGIN

FOR customer\_record IN customer\_cursor LOOP

IF customer\_record.Balance > 10000 THEN

UPDATE Customers

SET IsVIP = TRUE

WHERE CustomerID = customer\_record.CustomerID;

DBMS\_OUTPUT.PUT\_LINE('Promoted to VIP status for customer ID: ' || customer\_record.CustomerID);

ELSE

UPDATE Customers

SET IsVIP = 'N'

WHERE CustomerID = customer\_record.CustomerID;

END IF;

END LOOP;

COMMIT;

END;

Scenario 3:

DECLARE

CURSOR loan\_cursor IS

SELECT l.LoanID, l.CustomerID, l.EndDate, c.Name

FROM Loans l

JOIN Customers c ON l.CustomerID = c.CustomerID

WHERE l.EndDate BETWEEN SYSDATE AND SYSDATE + 30;

loan\_id loan.LoadID%TYPE;

due\_date loan.EndDate%TYPE;

customer\_id Customers.CustomerID%TYPE;

customer\_name Customers.Name%TYPE;

BEGIN

FOR loan\_record IN loan\_cursor LOOP

loan\_id := loan\_record.LoanID;

due\_date := loan\_record.EndDate;

customer\_id := loan\_record.CustomerID;

customer\_name := loan\_record.Name;

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ID ' || loan\_id || ' for customer ' || customer\_name || ' (ID: ' || customer\_id || ' ) is due on ' || TO\_CHAR(due\_date, 'YYYY-MM-DD') || '.');

END LOOP;

END;