**Exercise 1: Control Strucutures**

**Scenario 1: Apply 1% Discount to Loan Interest Rates for Customers Above 60**

**PL/SQL CODE:**

BEGIN

FOR customer IN (

SELECT c.CUSTOMERID, l.LOANID

FROM CUSTOMERS c JOIN LOANS l ON l.CUSTOMERID = c.CUSTOMERID

WHERE MONTHS\_BETWEEN(SYSDATE, c.DOB ) / 12 > 60

) LOOP

UPDATE LOANS SET INTERESTRATE = INTERESTRATE - 1 WHERE LOANID = customer.LOANID;

END LOOP;

COMMIT;

END;

**Scenario 2: Promote to VIP Based on Balance over $10,000**

**First we add a new column of VIP for CUSTOMER Table:**

**ALTER TABLE CUSTOMERS ADD VIP VARCHAR(5);**

**Then Make the VIP status False by default:**

**UPDATE CUSTOMERS SET VIP = 'FALSE';**

****PL/SQL CODE:****

**BEGIN**

FOR customer IN (

SELECT c.CUSTOMERID, a.ACCOUNTID, a.BALANCE FROM CUSTOMERS c JOIN ACCOUNTS a ON c.CUSTOMERID = a.ACCOUNTID

WHERE a.BALANCE > 10000

) LOOP

UPDATE CUSTOMERS SET VIP = 'TRUE' WHERE CUSTOMERID = customer.CUSTOMERID;

END LOOP;

COMMIT;

END;

****Scenario 3: Reminders for Loans Due in the Next 30 Days****

**To Enable output for our code:**

**SET SERVEROUTPUT ON;**

****PL/SQL CODE:****

**BEGIN**

FOR loan IN (

SELECT l.LOANID, l.ENDDATE, l.LOANAMOUNT, c.NAME

FROM LOANS l JOIN CUSTOMERS c ON l.CUSTOMERID = c.CUSTOMERID

WHERE l.ENDDATE BETWEEN SYSDATE AND SYSDATE + 30

) LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ID: ' || loan.LOANID ||

' To Customer: ' || loan.Name ||

' is due on ' || TO\_CHAR(loan.ENDDATE, 'DD-MON-YYYY'));

END LOOP;

COMMIT;

END;