**Exercise 6: Cursors**

**Scenario 1: Generate Monthly Statements**

**PL/ Block**:

DECLARE

CURSOR c\_transactions IS

SELECT \* FROM Transactions WHERE EXTRACT(MONTH FROM TransactionDate) = EXTRACT(MONTH FROM SYSDATE);

BEGIN

FOR rec IN c\_transactions LOOP

DBMS\_OUTPUT.PUT\_LINE('Statement for Transaction ID: ' || rec.TransactionID || ' - Amount: ' || rec.Amount);

END LOOP;

END;

/

**Sample Output**:

Statement for Transaction ID: 1 - Amount: 200

Statement for Transaction ID: 2 - Amount: 300

**Scenario 2: Apply Annual Fee**

**PL/ Block**:

DECLARE

CURSOR c\_accounts IS

SELECT \* FROM Accounts;

BEGIN

FOR rec IN c\_accounts LOOP

UPDATE Accounts

SET Balance = Balance - 50

WHERE AccountID = rec.AccountID;

END LOOP;

COMMIT;

END;

/

**Verification Query**:

SELECT \* FROM Accounts;

**Sample Output**:

ACCOUNTID | CUSTOMERID | ACCOUNTTYPE | BALANCE | LASTMODIFIED

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1 | 1 | Savings | 960 | 2024-08-08

2 | 2 | Checking | 1450 | 2024-08-08

**Scenario 3: Update Loan Interest Rates**

**PL/ Block**:

DECLARE

CURSOR c\_loans IS

SELECT \* FROM Loans;

BEGIN

FOR rec IN c\_loans LOOP

UPDATE Loans

SET InterestRate = InterestRate + 0.5

WHERE LoanID = rec.LoanID;

END LOOP;

COMMIT;

END;

/

**Verification Query**:

SELECT \* FROM Loans;

**Sample Output**:

LOANID | CUSTOMERID | LOANAMOUNT | INTERESTRATE | STARTDATE | ENDDATE

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1 | 1 | 5000 | 5.5 | 2024-08-08| 2029-08-08