**Cursors**

**Scenario 1:**

DECLARE

  CURSOR txn\_cur IS

    SELECT t.TransactionID, t.AccountID, t.Amount, t.TransactionDate, t.TransactionType, c.Name

    FROM Transactions t

    JOIN Accounts a ON t.AccountID = a.AccountID

    JOIN Customers c ON a.CustomerID = c.CustomerID

    WHERE TRUNC(t.TransactionDate, 'MM') = TRUNC(SYSDATE, 'MM');

  txn\_rec txn\_cur%ROWTYPE;

BEGIN

  OPEN txn\_cur;

  LOOP

    FETCH txn\_cur INTO txn\_rec;

    EXIT WHEN txn\_cur%NOTFOUND;

    DBMS\_OUTPUT.PUT\_LINE('Statement → Customer: ' || txn\_rec.Name ||

                         ' | Account ID: ' || txn\_rec.AccountID ||

                         ' | ' || txn\_rec.TransactionType ||

                         ' ₹' || txn\_rec.Amount ||

                         ' on ' || TO\_CHAR(txn\_rec.TransactionDate, 'DD-Mon-YYYY'));

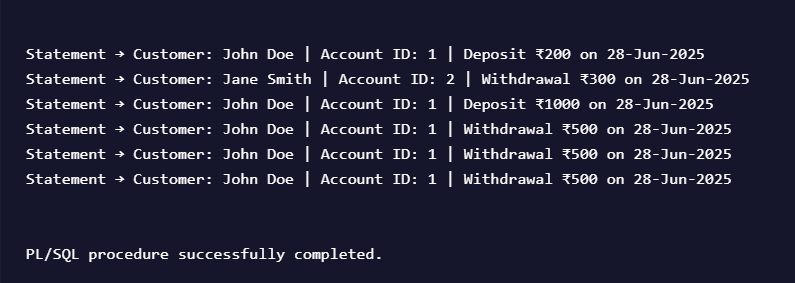
  END LOOP;

  CLOSE txn\_cur;

END;

/

**Output:**

****

**Scenario 2:**

DECLARE

  CURSOR acc\_cur IS

    SELECT AccountID FROM Accounts;

  acc\_rec acc\_cur%ROWTYPE;

BEGIN

  OPEN acc\_cur;

  LOOP

    FETCH acc\_cur INTO acc\_rec;

    EXIT WHEN acc\_cur%NOTFOUND;

    UPDATE Accounts

    SET Balance = Balance - 200

    WHERE AccountID = acc\_rec.AccountID;

    DBMS\_OUTPUT.PUT\_LINE('Annual fee deducted from Account ID: ' || acc\_rec.AccountID);

  END LOOP;

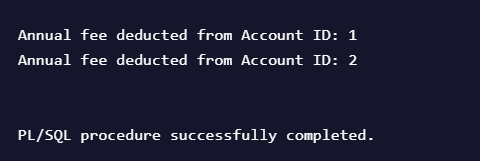
  CLOSE acc\_cur;

  COMMIT;

END;

/

**Output:**

****

**Scenario 3:**

DECLARE

  CURSOR loan\_cur IS

    SELECT LoanID, InterestRate FROM Loans;

  loan\_rec loan\_cur%ROWTYPE;

BEGIN

  OPEN loan\_cur;

  LOOP

    FETCH loan\_cur INTO loan\_rec;

    EXIT WHEN loan\_cur%NOTFOUND;

    UPDATE Loans

    SET InterestRate = loan\_rec.InterestRate + 0.5

    WHERE LoanID = loan\_rec.LoanID;

    DBMS\_OUTPUT.PUT\_LINE('Interest updated for Loan ID: ' || loan\_rec.LoanID);

  END LOOP;

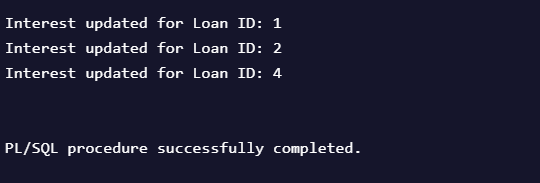
  CLOSE loan\_cur;

  COMMIT;

END;

/

**Output:**

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