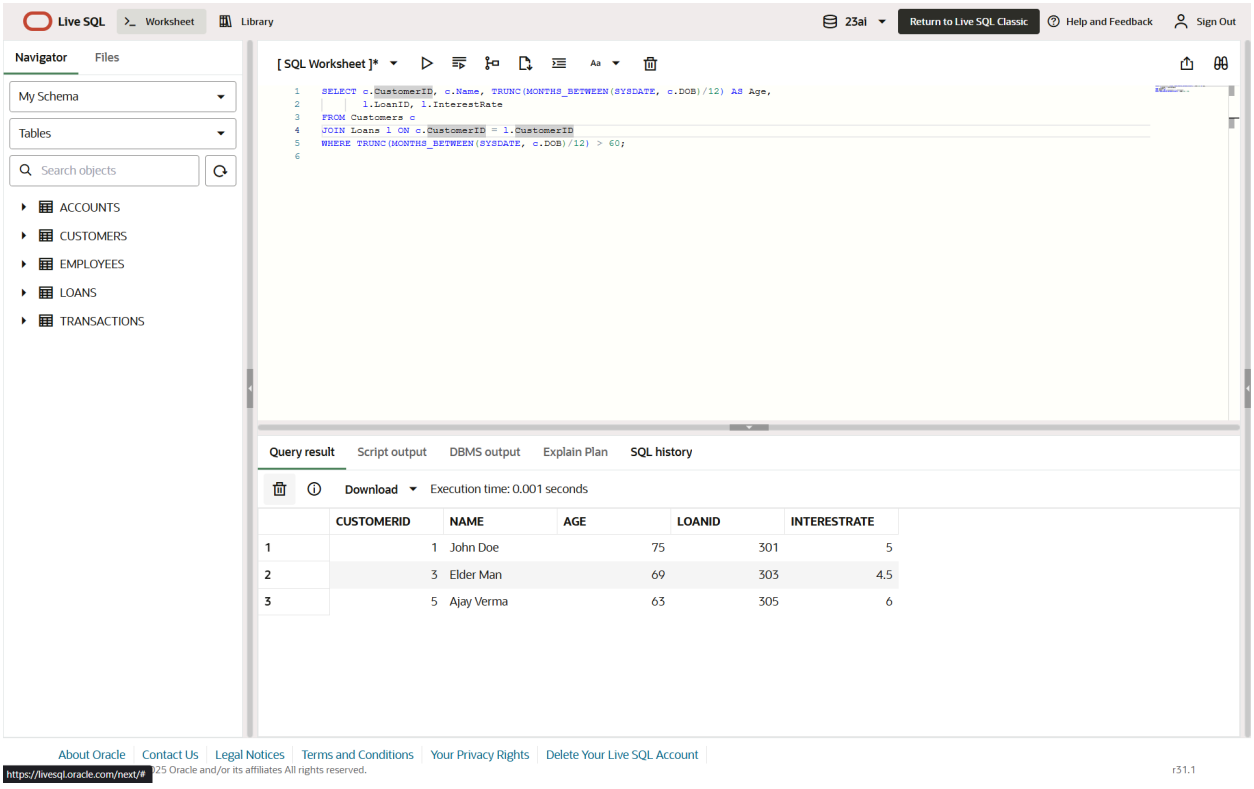
EXERCISE : 01 Control Structures

→ Scenario 1: The bank wants to apply a discount to loan interest rates for customers above 60 years old.

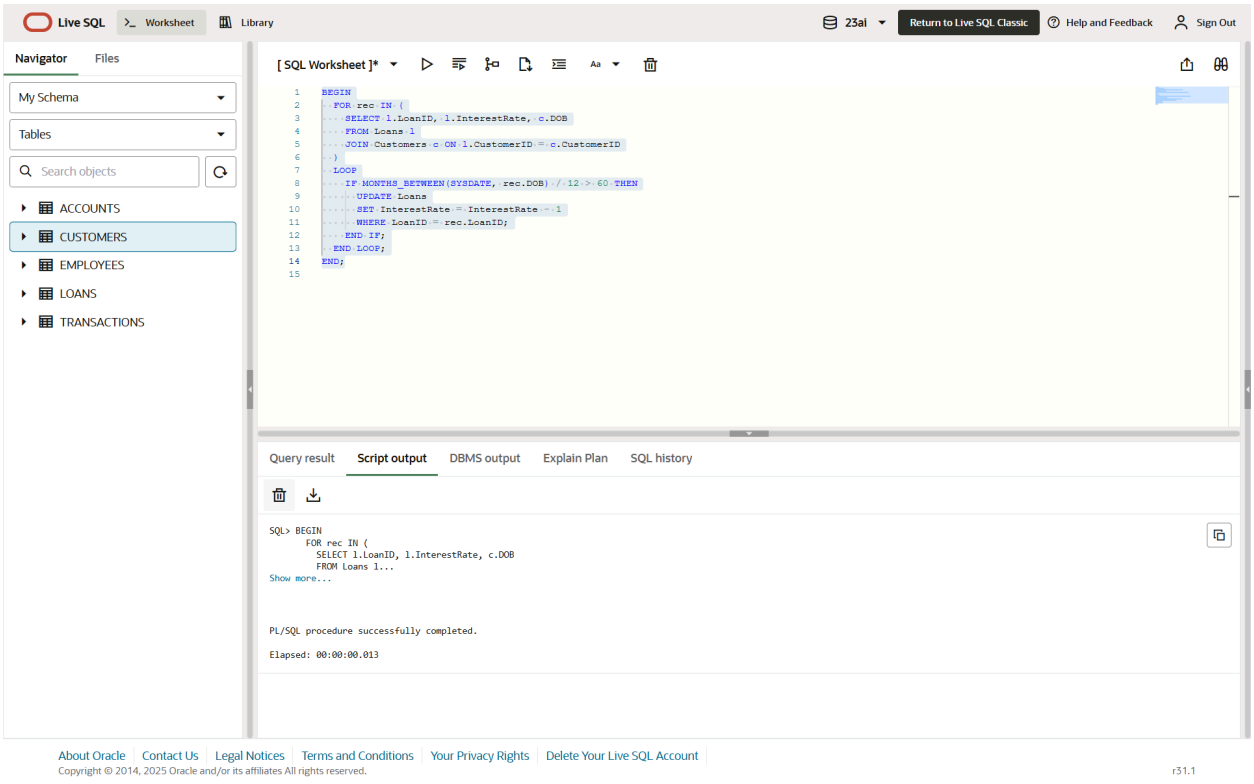
- Before execution



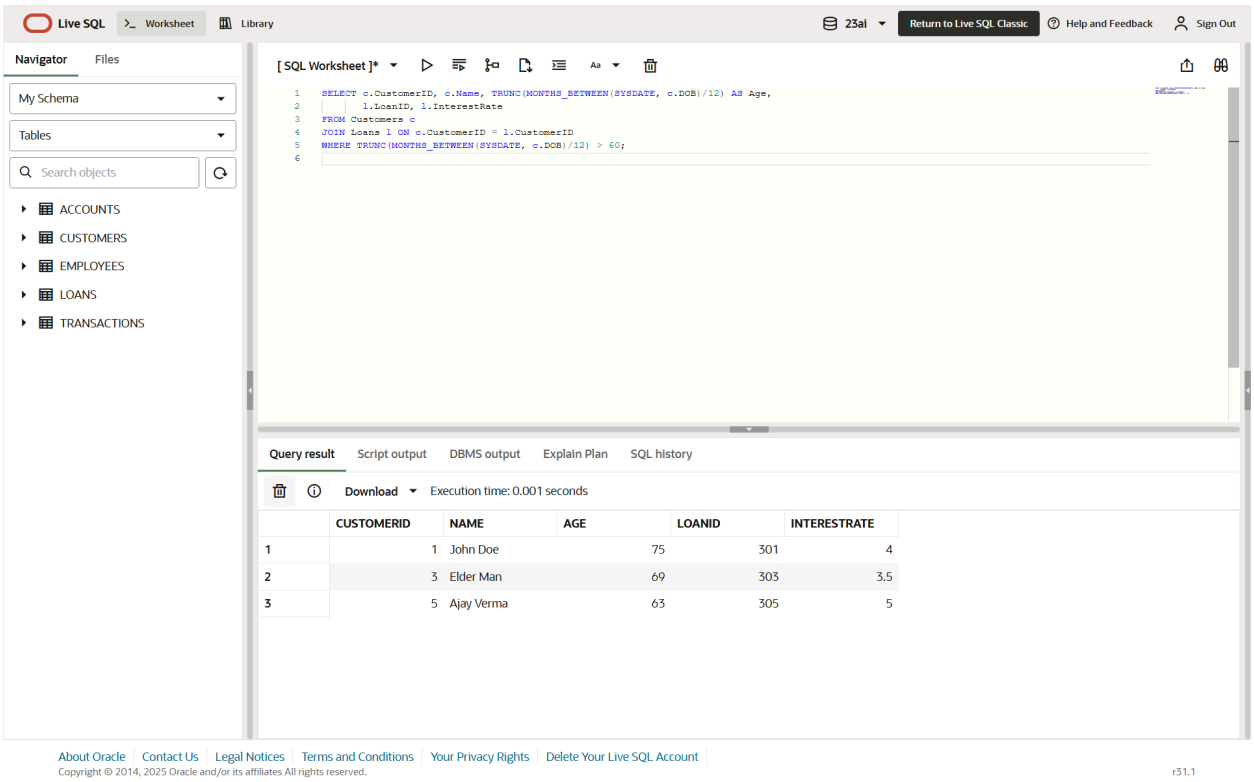
- Script

```
BEGIN
  FOR rec IN (
    SELECT l.LoanID, l.InterestRate, c.DOB
    FROM Loans l
    JOIN Customers c ON l.CustomerID = c.CustomerID
  )
```

```
  LOOP
    IF MONTHS_BETWEEN(SYSDATE, rec.DOB) / 12 > 60 THEN
      UPDATE Loans
      SET InterestRate = InterestRate - 1
      WHERE LoanID = rec.LoanID;
    END IF;
  END LOOP;
END;
```

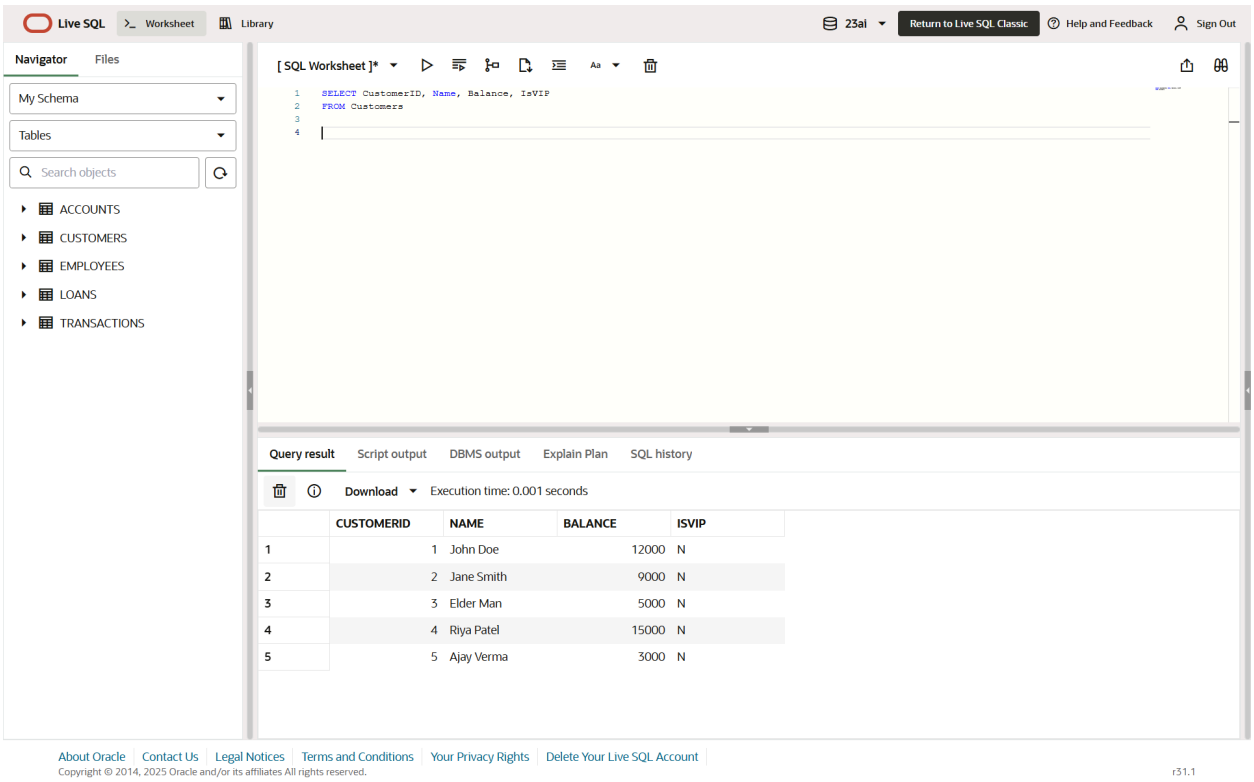


- Output



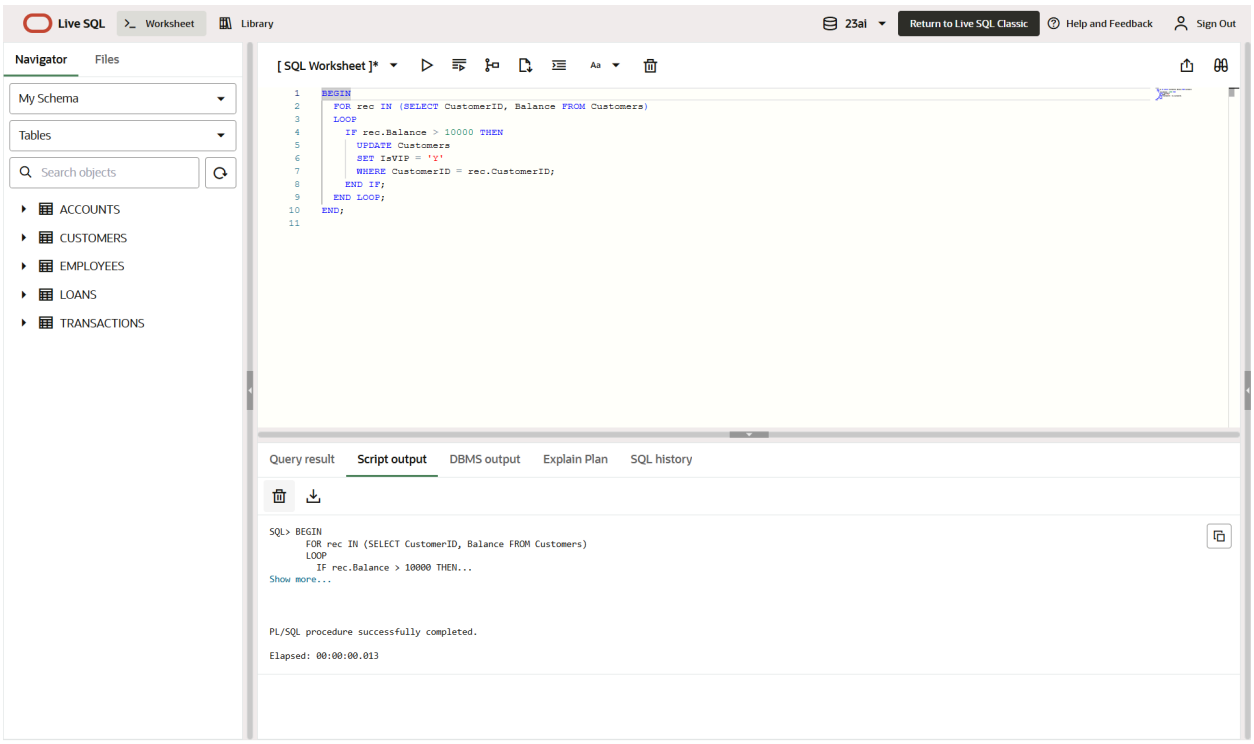
→ Scenario 2: A customer can be promoted to VIP status based on their balance

- Before execution



- Script

```
BEGIN
  FOR rec IN (SELECT CustomerID, Balance FROM Customers)
  LOOP
    IF rec.Balance > 10000 THEN
      UPDATE Customers
      SET IsVIP = 'Y'
      WHERE CustomerID = rec.CustomerID;
    END IF;
  END LOOP;
END;
```


Live SQL
Worksheet
Library
23ai
Return to Live SQL Classic
Help and Feedback
Sign Out
Navigator
Files
My Schema
Tables
Search objects
ACCOUNTS
CUSTOMERS
EMPLOYEES
LOANS
TRANSACTIONS
[SQL Worksheet]*
BEGIN
FOR rec IN (SELECT CustomerID, Balance FROM Customers)
LOOP
IF rec.Balance > 10000 THEN
UPDATE Customers
SET IsVIP = 'Y'
WHERE CustomerID = rec.CustomerID;
END IF;
END LOOP;
END;
Query result
Script output
DBMS output
Explain Plan
SQL history
SQL> BEGIN
FOR rec IN (SELECT CustomerID, Balance FROM Customers)
LOOP
IF rec.Balance > 10000 THEN...
Show more...
PL/SQL procedure successfully completed.
Elapsed: 00:00:00.013
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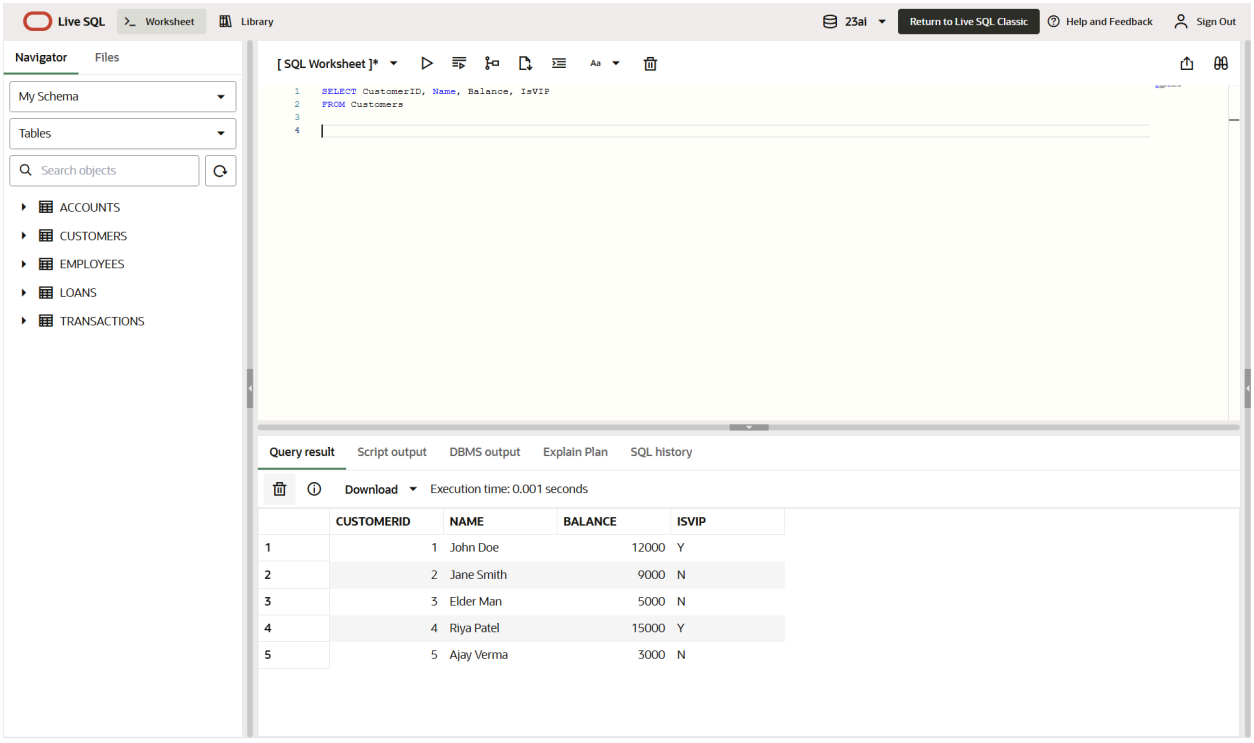
- Output


Live SQL
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Navigator
Files
My Schema
Tables
Search objects
ACCOUNTS
CUSTOMERS
EMPLOYEES
LOANS
TRANSACTIONS
[SQL Worksheet]*
SELECT CustomerID, Name, Balance, IsVIP
FROM Customers
Query result
Script output
DBMS output
Explain Plan
SQL history
Download
Execution time: 0.001 seconds
CUSTOMERID NAME BALANCE ISVIP
1 1 John Doe 12000 Y
2 2 Jane Smith 9000 N
3 3 Elder Man 5000 N
4 4 Riya Patel 15000 Y
5 5 Ajay Verma 3000 N
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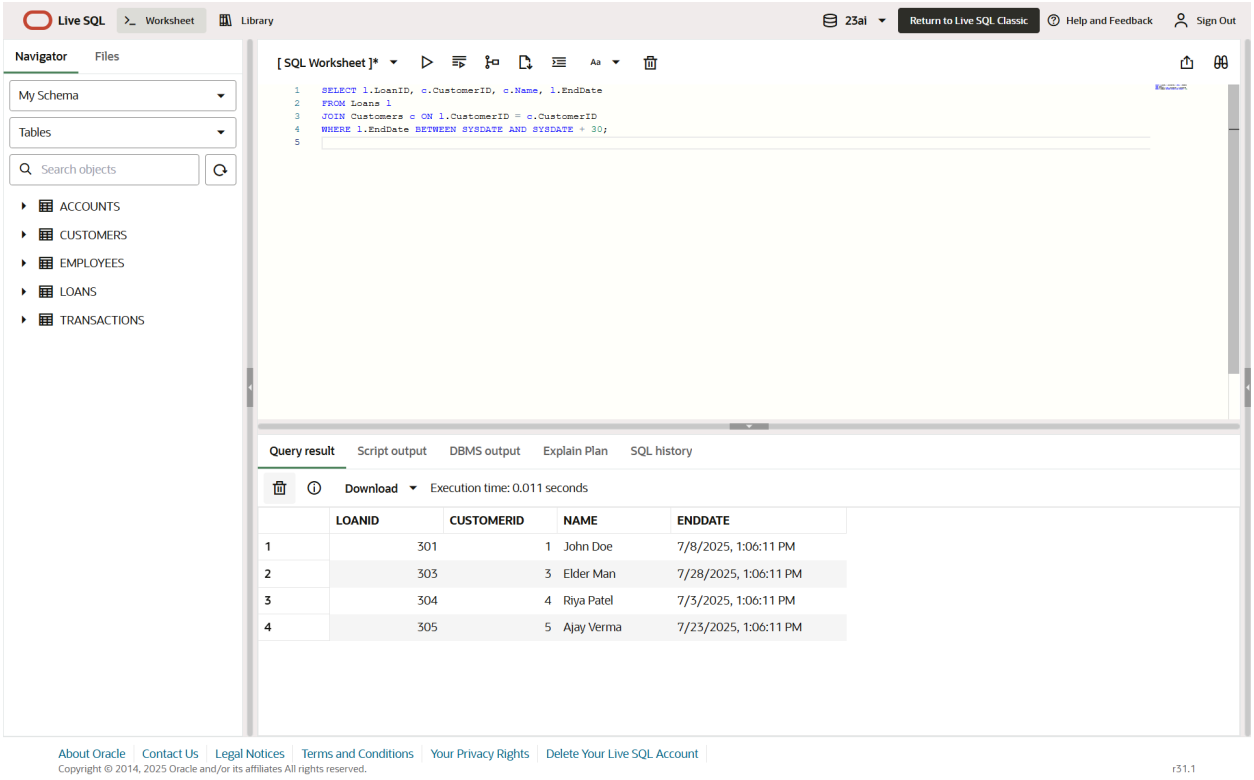
→ Scenario 3:The bank wants to send reminders to customers whose loans are due within the next 30 days.\

- Before script



- Script and output

```
BEGIN
  FOR rec IN (
    SELECT l.LoanID, c.Name, l.EndDate
    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 ' || rec.LoanID || ' for customer ' || rec.Name ||
    ' is due on ' || TO_CHAR(rec.EndDate, 'YYYY-MM-DD')
  );
 END LOOP;
END;
/
```