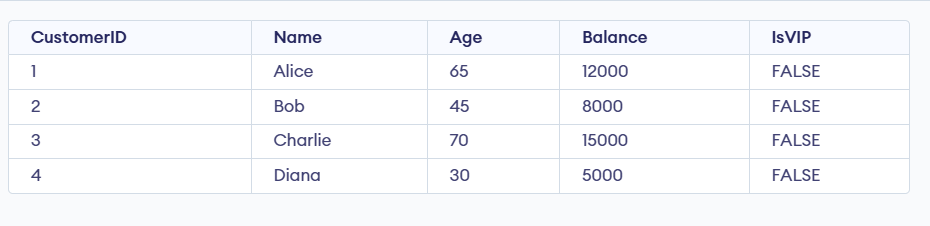
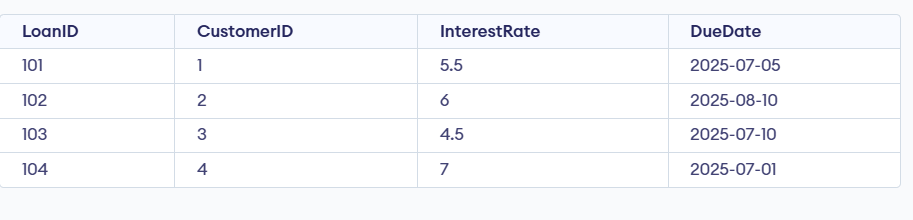
**Exercise 1: Control Structures**

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

Question: Write a PL/SQL block that loops through all customers, checks their age, and if they are above 60, apply a 1% discount to their current loan interest rates.

BEGIN

FOR customer\_rec IN (SELECT CustomerID, Age FROM CUSTOMERS) LOOP

IF customer\_rec.Age > 60 THEN

UPDATE LOANS

SET InterestRate = InterestRate - 1

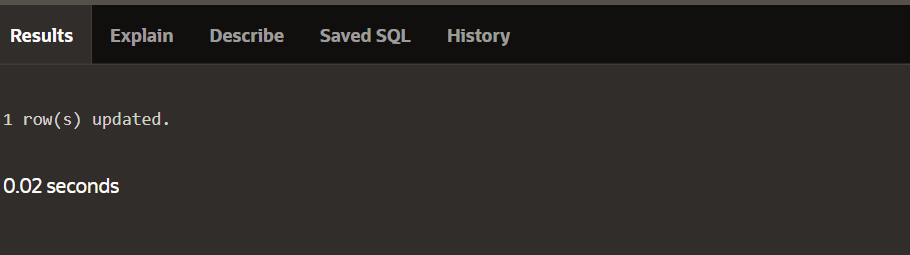
WHERE CustomerID = customer\_rec.CustomerID;

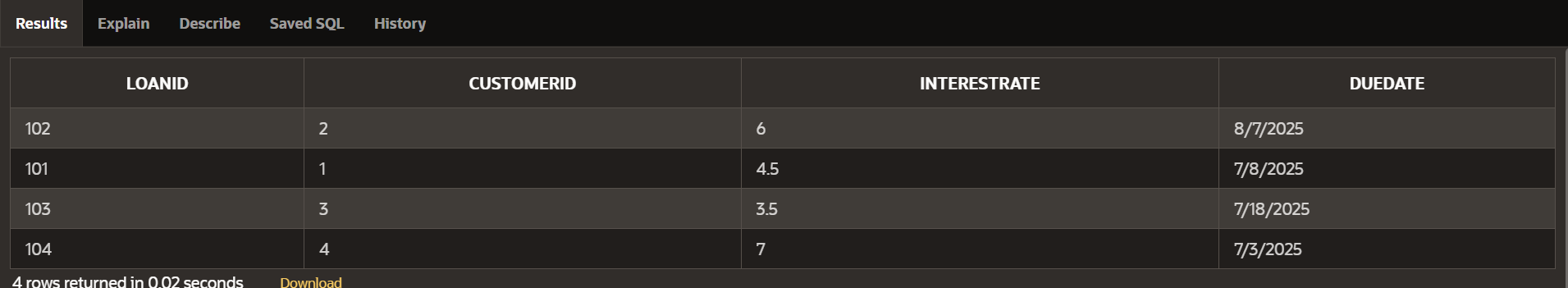
END IF;

END LOOP;

COMMIT;

END;





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

**Question:** Write a PL/SQL block that iterates through all customers and sets a flag IsVIP to TRUE for those with a balance over $10,000.

BEGIN

FOR customer\_rec IN (SELECT CustomerID, Balance FROM CUSTOMERS) LOOP

IF customer\_rec.Balance > 10000 THEN

UPDATE CUSTOMERS

SET IsVIP = 'TRUE'

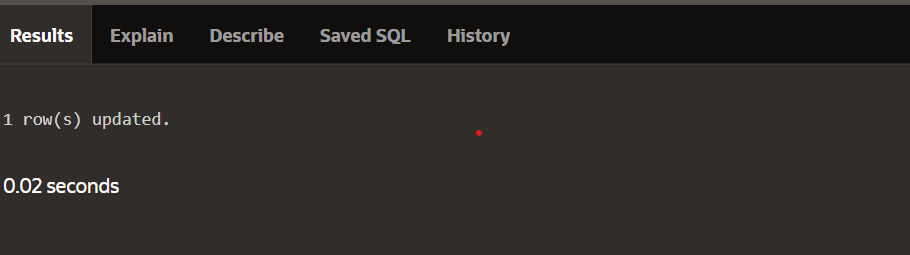
WHERE CustomerID = customer\_rec.CustomerID;

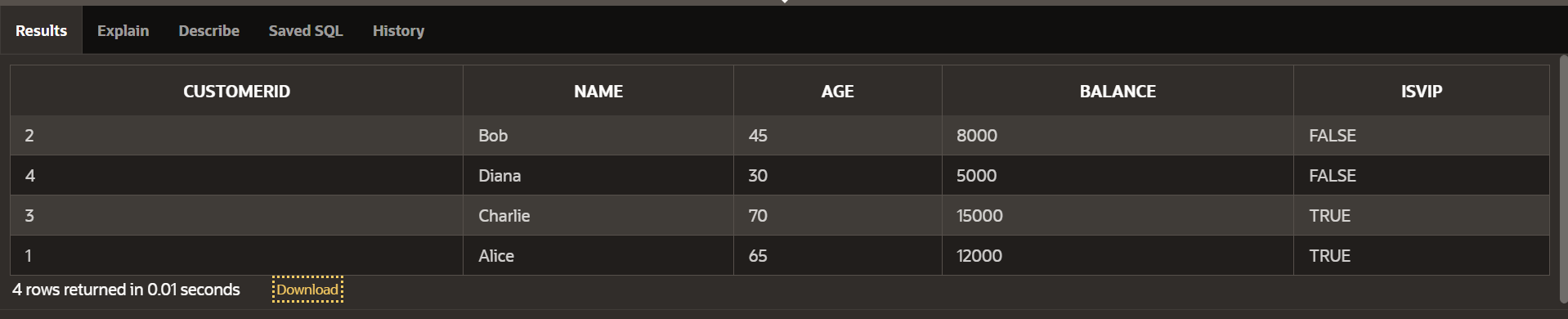
END IF;

END LOOP;

COMMIT;

END;





**Scenario 3:** The bank wants to send reminders to customers whose loans are due within the next 30 days.

**Question:** Write a PL/SQL block that fetches all loans due in the next 30 days and prints a reminder message for each customer.

DECLARE

v\_due\_date\_limit DATE := SYSDATE + 30;

BEGIN

FOR loan\_rec IN (

SELECT LoanID, CustomerID, DueDate

FROM LOANS

WHERE DueDate <= v\_due\_date\_limit

) LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ' || loan\_rec.LoanID ||

' for Customer ' || loan\_rec.CustomerID ||

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

END LOOP;

END;

