**Week 2 – PL / SQL PROGRAMMING**

**Exercise 1: Control Structures**

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

o**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.**

**CODE :**

BEGIN

FOR rec IN (SELECT \* FROM customers) LOOP

IF rec.age > 60 THEN

UPDATE customers

SET interest\_rate = interest\_rate - 1

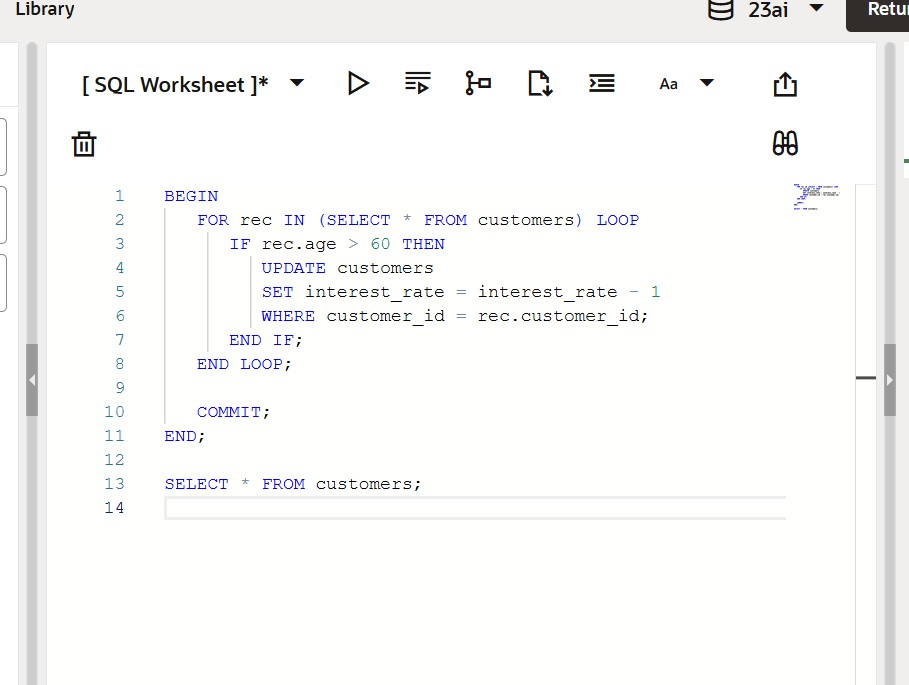
WHERE customer\_id = rec.customer\_id;

END IF;

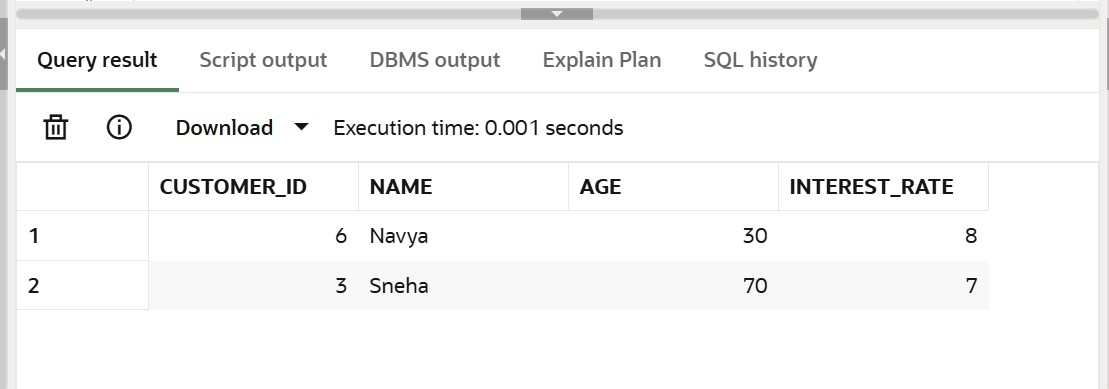
END LOOP;

COMMIT;

END;



**OUTPUT :**



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

o**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.**

**CODE:**

BEGIN

FOR rec IN (SELECT \* FROM customer\_accounts) LOOP

IF rec.balance > 10000 THEN

UPDATE customer\_accounts

SET is\_vip = 'TRUE'

WHERE customer\_id = rec.customer\_id;

END IF;

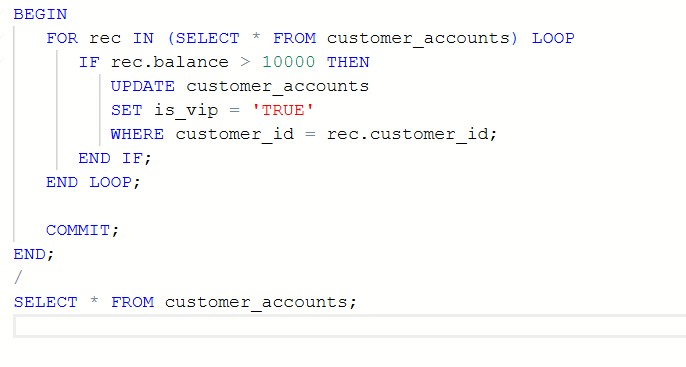
END LOOP;

COMMIT;

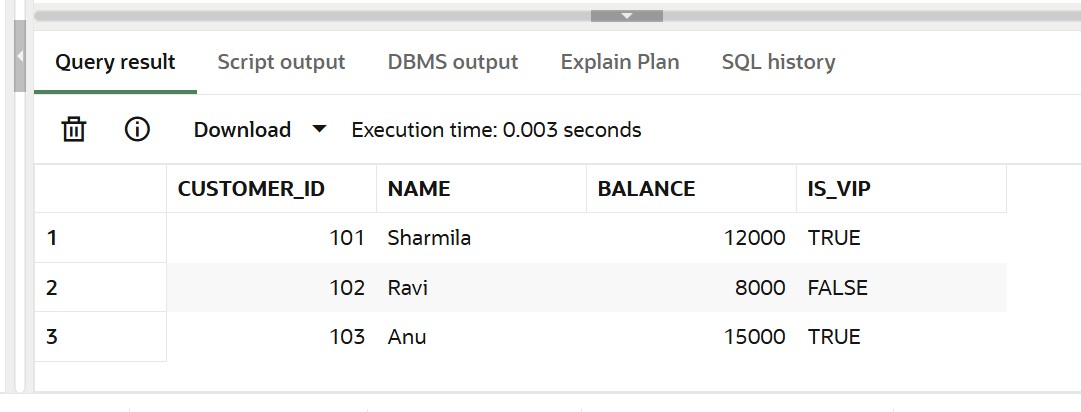
END;

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SELECT \* FROM customer\_accounts;



**OUTPUT :**



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

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

**CODE :**

BEGIN

FOR rec IN (SELECT \* FROM loans WHERE due\_date <= SYSDATE + 30) LOOP

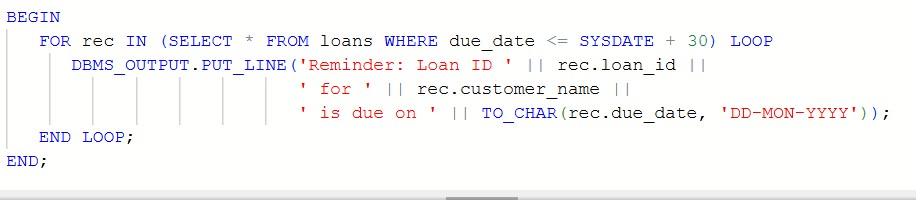
DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ID ' || rec.loan\_id ||

' for ' || rec.customer\_name ||

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

END LOOP;

END;



**OUTPUT :**

