

## Outputs:

**Scenario 1: Automatically update the last modified date when a customer's record is updated.**

The screenshot shows the SQL Developer interface with the 'SCRIPT OUTPUT' tab selected. The output displays the compilation of a trigger named 'UPDATECUSTOMERLASTMODIFIED' and the execution of SQL statements. The statements include an insert, an update, and a select query. The 'QUERY RESULT' tab below shows the results of the select query.

```
More Details :  
https://docs.oracle.com/error-help/db/ora-04089/  
  
Trigger UPDATECUSTOMERLASTMODIFIED compiled  
  
1 row inserted.  
  
1 row updated.  
  
13 | -- Test the trigger  
14 | -- Insert a test customer  
15 | INSERT INTO Customers (CustomerID, Name, DOB, Balance, LastModified)  
16 | VALUES (12, 'John Doe', TO_DATE('1990-01-01', 'YYYY-MM-DD'), 1000, SYSDATE);  
17 |  
18 | UPDATE Customers  
19 | SET Balance = Balance + 500  
20 | WHERE CustomerID = 12;  
21 |  
22 | SELECT * FROM Customers WHERE CustomerID = 12;  
23 |  
24 |  
25 |
```

All rows fetched: 1 in 0.044 seconds

	CUSTOMERID	NAME	DOB	BALANCE	LASTMODIFIED
1	12	John Doe	01/01/90	1500	29/06/25

**Scenario-2: Maintain an audit log for all transactions.**

The screenshot shows the SQL Developer interface with the 'SCRIPT OUTPUT' tab selected. The output displays the compilation of a trigger named 'LOGTRANSACTION' and the execution of SQL statements. The statements include an insert and two more inserts.

```
53 | -- Insert a transaction  
54 | INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)  
55 | VALUES (5001, 100, SYSDATE, 200, 'Deposit');  
--  
  
Trigger LOGTRANSACTION compiled  
  
1 row inserted.  
  
1 row inserted.  
  
1 row inserted.
```

```

45
46 --Test the trigger
47
48 INSERT INTO Customers (CustomerID, Name, DOB, Balance, LastModified)
49 VALUES (1, 'Alice', TO_DATE('1995-01-01', 'YYYY-MM-DD'), 5000, SYSDATE);
50 -- Insert required data into Accounts
51 INSERT INTO Accounts (AccountID, CustomerID, AccountType, Balance, LastModified)
52 VALUES (100, 1, 'Savings', 2000, SYSDATE);
53
54 -- Insert a transaction
55 INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)
56 VALUES (5001, 100, SYSDATE, 200, 'Deposit');
57
58 -- Check audit log
59 SELECT * FROM AuditLog WHERE TransactionID = 5001;
60
61

```

PROBLEMS 24 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS PORTS AZURE QUERY RESULT SCRIPT OUTPUT SQL HISTORY TASK MONITOR

All rows fetched: 1 in 0.029 seconds

	LOGID	TRANSACTIONID	ACCOUNTID	TRANSACTIONDATE	AMOUNT	TRANSACTIONTYPE	LOGGEDAT
1	2	5001	100	29/06/25	200	Deposit	29/06/25

### Scenario 3: Enforce business rules on deposits and withdrawals.

PROBLEMS 24 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS PORTS AZURE QUERY RESULT SCRIPT OUTPUT SQL HISTORY TASK MONITOR

```

Trigger CHECKTRANSACTIONRULES compiled

1 row inserted.

Error starting at line : 1 in command -
INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)
VALUES (5003, 100, SYSDATE, 3000, 'Withdrawal')
Error at Command Line : 1 Column : 13
Error report -
SQL Error: ORA-20001: Withdrawal amount exceeds account balance
ORA-06512: at "BANKING_USER.CHECKTRANSACTIONRULES", line 10
ORA-04088: error during execution of trigger 'BANKING_USER.CHECKTRANSACTIONRULES'

https://docs.oracle.com/error-help/db/ora-20001/

More Details :
https://docs.oracle.com/error-help/db/ora-20001/
https://docs.oracle.com/error-help/db/ora-06512/
https://docs.oracle.com/error-help/db/ora-04088/

Error starting at line : 1 in command -
INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)
VALUES (5004, 100, SYSDATE, -50, 'Deposit')
Error at Command Line : 1 Column : 13
Error report -
SQL Error: ORA-20002: Deposit amount must be positive
ORA-06512: at "BANKING_USER.CHECKTRANSACTIONRULES", line 16
ORA-04088: error during execution of trigger 'BANKING_USER.CHECKTRANSACTIONRULES'

https://docs.oracle.com/error-help/db/ora-20002/

More Details :
https://docs.oracle.com/error-help/db/ora-20002/
https://docs.oracle.com/error-help/db/ora-06512/

```