# **Scenario 1:**

Procedure Creation:

CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest IS

BEGIN

FOR acc IN (SELECT AccountID, Balance FROM Accounts WHERE AccountType = 'Savings') LOOP

UPDATE Accounts

SET Balance = acc.Balance \* 1.01,

LastModified = SYSDATE

WHERE AccountID = acc.AccountID;

END LOOP;

COMMIT;

END;

/

Checking Before Update;

SELECT AccountID, AccountType, Balance FROM Accounts WHERE AccountType = 'Savings';

Executing Procedure:

BEGIN

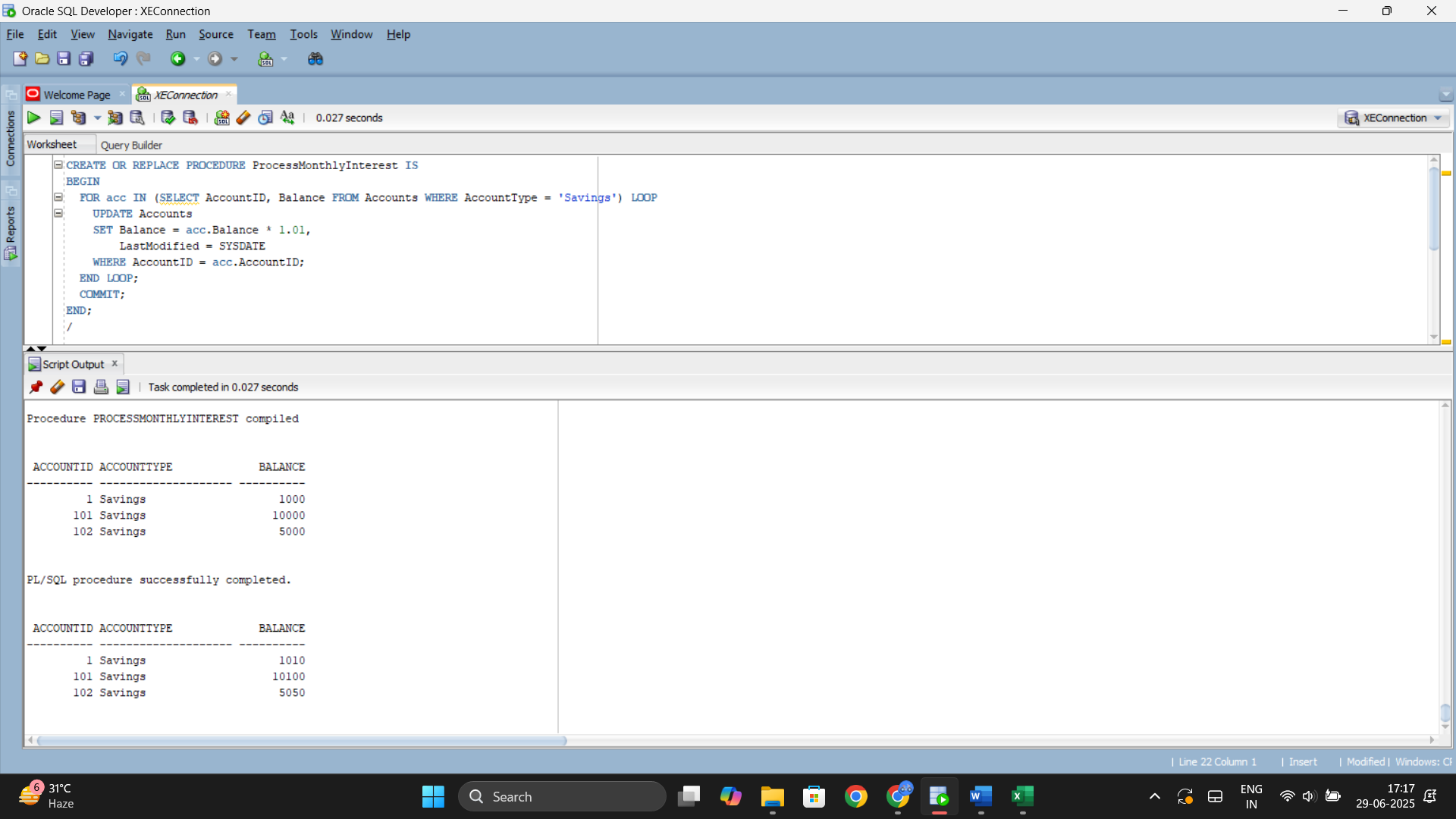
ProcessMonthlyInterest;

END;

/

Checking After Update:

SELECT AccountID, AccountType, Balance FROM Accounts WHERE AccountType = 'Savings';



# **Scenario 2:**

Procedure Creation:

CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus (

p\_Department IN VARCHAR2,

p\_BonusPercentage IN NUMBER

) IS

BEGIN

UPDATE Employees

SET Salary = Salary + (Salary \* p\_BonusPercentage / 100)

WHERE Department = p\_Department;

COMMIT;

END;

/

Checking Before Update;

SELECT EmployeeID, Name, Department, Salary FROM Employees WHERE Department = 'IT';

Executing Procedure:

BEGIN

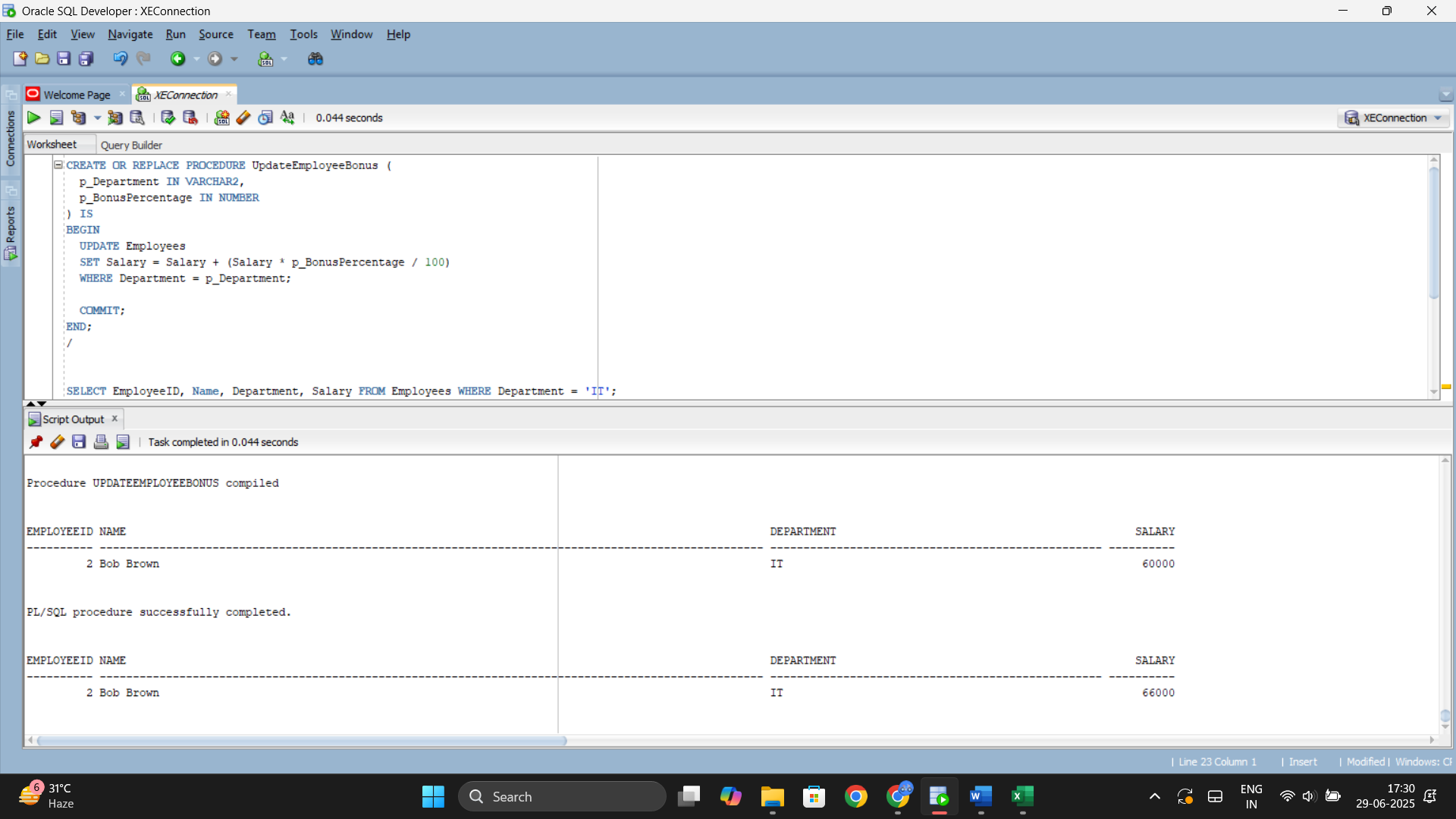
UpdateEmployeeBonus('IT', 10);

END;

/

Checking After Update:

SELECT EmployeeID, Name, Department, Salary FROM Employees WHERE Department = 'IT';



# **Scenario 3:**

Procedure Creation:

CREATE OR REPLACE PROCEDURE TransferFunds (

p\_FromAccountID IN NUMBER,

p\_ToAccountID IN NUMBER,

p\_Amount IN NUMBER

) IS

v\_Balance NUMBER;

BEGIN

SELECT Balance INTO v\_Balance

FROM Accounts

WHERE AccountID = p\_FromAccountID

FOR UPDATE;

IF v\_Balance < p\_Amount THEN

RAISE\_APPLICATION\_ERROR(-20001, 'Insufficient funds in source account.');

END IF;

UPDATE Accounts

SET Balance = Balance - p\_Amount,

LastModified = SYSDATE

WHERE AccountID = p\_FromAccountID;

UPDATE Accounts

SET Balance = Balance + p\_Amount,

LastModified = SYSDATE

WHERE AccountID = p\_ToAccountID;

COMMIT;

END;

/

Checking Before Update;

SELECT AccountID, Balance FROM Accounts WHERE AccountID IN (103, 104);

Executing Procedure:

BEGIN

TransferFunds(103, 104, 1000);

END;

/

Checking After Update:

SELECT AccountID, Balance FROM Accounts WHERE AccountID IN (103, 104);

