**-- SCENARIO 1**

SELECT \* FROM ACCOUNTS;

SET SERVEROUTPUT ON;

CREATE OR REPLACE PROCEDURE PROCESSMONTHLYINTEREST AS

BEGIN

UPDATE ACCOUNTS

SET BALANCE = BALANCE \* 1.01,

LASTMODIFIED = SYSDATE

WHERE ACCOUNTTYPE = 'Savings';

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Monthly interest processed for all savings accounts.');

EXCEPTION

WHEN OTHERS THEN

ROLLBACK;

DBMS\_OUTPUT.PUT\_LINE('Error processing monthly interest: ' || SQLERRM);

END PROCESSMONTHLYINTEREST;

/

EXEC PROCESSMONTHLYINTEREST();

SELECT \* FROM ACCOUNTS;

**-- SCENARIO 2**

SELECT \* FROM EMPLOYEES;

SET SERVEROUTPUT ON;

CREATE OR REPLACE PROCEDURE UPDATEEMPLOYEEBONUS(

P\_DEPARTMENT IN EMPLOYEES.DEPARTMENT%TYPE,

P\_BONUS\_PERCENTAGE IN NUMBER

) AS

BEGIN

UPDATE EMPLOYEES

SET SALARY = SALARY \* (1 + P\_BONUS\_PERCENTAGE / 100),

HIREDATE = SYSDATE

WHERE DEPARTMENT = P\_DEPARTMENT;

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Bonus applied to employees in the ' || P\_DEPARTMENT || ' department.');

EXCEPTION

WHEN OTHERS THEN

ROLLBACK;

DBMS\_OUTPUT.PUT\_LINE('Error updating employee bonuses: ' || SQLERRM);

END UPDATEEMPLOYEEBONUS;

/

EXEC UPDATEEMPLOYEEBONUS('IT',5);

EXEC UPDATEEMPLOYEEBONUS('HR',3);

SELECT \* FROM EMPLOYEES;

**-- SCENARIO 3**

SELECT \* FROM ACCOUNTS;

SET SERVEROUTPUT ON;

CREATE OR REPLACE PROCEDURE TRANSFERFUNDS(

P\_FROM\_ACCOUNT\_ID IN ACCOUNTS.ACCOUNTID%TYPE,

P\_TO\_ACCOUNT\_ID IN ACCOUNTS.ACCOUNTID%TYPE,

P\_AMOUNT IN NUMBER

) AS

V\_FROM\_BALANCE ACCOUNTS.BALANCE%TYPE;

BEGIN

SELECT BALANCE INTO V\_FROM\_BALANCE

FROM ACCOUNTS

WHERE ACCOUNTID = P\_FROM\_ACCOUNT\_ID

FOR UPDATE;

-- Check for sufficient funds

IF V\_FROM\_BALANCE < P\_AMOUNT THEN

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

END IF;

-- Perform the transfer

UPDATE ACCOUNTS

SET BALANCE = BALANCE - P\_AMOUNT,

LASTMODIFIED = SYSDATE

WHERE ACCOUNTID = P\_FROM\_ACCOUNT\_ID;

UPDATE ACCOUNTS

SET BALANCE = BALANCE + P\_AMOUNT,

LASTMODIFIED = SYSDATE

WHERE ACCOUNTID = P\_TO\_ACCOUNT\_ID;

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Transfer of ' || P\_AMOUNT || ' from account ' || P\_FROM\_ACCOUNT\_ID || ' to account ' || P\_TO\_ACCOUNT\_ID || ' completed successfully.');

EXCEPTION

WHEN OTHERS THEN

ROLLBACK;

DBMS\_OUTPUT.PUT\_LINE('Transfer failed: ' || SQLERRM);

END TRANSFERFUNDS;

/

EXEC TRANSFERFUNDS(1,2,100);

SELECT \* FROM ACCOUNTS;

/\*