Stored Procedures

1. CREATE OR REPLACE PROCEDURE ProcessMonthlyInterest AS

BEGIN

FOR account\_rec IN (SELECT account\_id, balance FROM savings\_accounts)

LOOP

DECLARE

v\_interest NUMBER;

BEGIN

v\_interest := account\_rec.balance \* 0.01; -- 1% interest

UPDATE savings\_accounts

SET balance = account\_rec.balance + v\_interest

WHERE account\_id = account\_rec.account\_id;

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error updating account ' || account\_rec.account\_id);

END;

END LOOP;

DBMS\_OUTPUT.PUT\_LINE('Monthly interest processed successfully.');

END;

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1. CREATE OR REPLACE PROCEDURE UpdateEmployeeBonus(

p\_department\_id NUMBER,

p\_bonus\_percentage NUMBER

) AS

BEGIN

FOR employee\_rec IN (SELECT employee\_id, salary FROM employees WHERE department\_id = p\_department\_id)

LOOP

DECLARE

v\_bonus\_amount NUMBER;

BEGIN

v\_bonus\_amount := employee\_rec.salary \* (p\_bonus\_percentage / 100);

UPDATE employees

SET salary = employee\_rec.salary + v\_bonus\_amount

WHERE employee\_id = employee\_rec.employee\_id;

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error updating salary for Employee ' || employee\_rec.employee\_id);

END;

END LOOP;

DBMS\_OUTPUT.PUT\_LINE('Employee bonuses updated successfully.');

END;

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1. CREATE OR REPLACE PROCEDURE TransferFunds(

p\_from\_account\_id NUMBER,

p\_to\_account\_id NUMBER,

p\_amount NUMBER

) AS

v\_from\_balance NUMBER;

v\_to\_balance NUMBER;

BEGIN

SELECT balance INTO v\_from\_balance FROM accounts WHERE account\_id = p\_from\_account\_id;

SELECT balance INTO v\_to\_balance FROM accounts WHERE account\_id = p\_to\_account\_id;

IF v\_from\_balance >= p\_amount THEN

UPDATE accounts SET balance = v\_from\_balance - p\_amount WHERE account\_id = p\_from\_account\_id;

UPDATE accounts SET balance = v\_to\_balance + p\_amount WHERE account\_id = p\_to\_account\_id;

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Funds transferred successfully.');

ELSE

ROLLBACK;

DBMS\_OUTPUT.PUT\_LINE('Insufficient funds for transfer.');

END IF;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('Account not found.');

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('An error occurred while transferring funds.');

END TransferFunds;

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