# Scenario 1:

CREATE OR REPLACE PROCEDURE SafeTransferFunds(

p\_FromAccountID NUMBER,

p\_ToAccountID NUMBER,

p\_Amount NUMBER

) IS

InsufficientFunds EXCEPTION;

v\_FromBalance NUMBER;

v\_ToBalance NUMBER;

BEGIN

SELECT Balance INTO v\_FromBalance FROM Accounts WHERE AccountID = p\_FromAccountID;

SELECT Balance INTO v\_ToBalance FROM Accounts WHERE AccountID = p\_ToAccountID;

IF v\_FromBalance < p\_Amount THEN

RAISE InsufficientFunds;

END IF;

UPDATE Accounts SET Balance = Balance - p\_Amount WHERE AccountID = p\_FromAccountID;

UPDATE Accounts SET Balance = Balance + p\_Amount WHERE AccountID = p\_ToAccountID;

COMMIT;

EXCEPTION

WHEN InsufficientFunds THEN

DBMS\_OUTPUT.PUT\_LINE('Error: Insufficient funds in the source account.');

ROLLBACK;

WHEN OTHERS THEN

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

ROLLBACK;

END;

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# Scenario 2:

CREATE OR REPLACE PROCEDURE UpdateSalary(

p\_EmployeeID NUMBER,

p\_Percentage NUMBER

) IS

EmployeeNotFound EXCEPTION;

PRAGMA EXCEPTION\_INIT(EmployeeNotFound, -01403);

BEGIN

UPDATE Employees

SET Salary = Salary \* (1 + p\_Percentage / 100)

WHERE EmployeeID = p\_EmployeeID;

IF SQL%NOTFOUND THEN

RAISE EmployeeNotFound;

END IF;

COMMIT;

EXCEPTION

WHEN EmployeeNotFound THEN

DBMS\_OUTPUT.PUT\_LINE('Error: Employee ID ' || p\_EmployeeID || ' does not exist.');

ROLLBACK;

WHEN OTHERS THEN

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

ROLLBACK;

END;

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# Scenario 3:

CREATE OR REPLACE PROCEDURE AddNewCustomer(

p\_CustomerID NUMBER,

p\_Name VARCHAR2,

p\_DOB DATE,

p\_Balance NUMBER

) IS

CustomerExists EXCEPTION;

PRAGMA EXCEPTION\_INIT(CustomerExists, -00001);

BEGIN

INSERT INTO Customers (CustomerID, Name, DOB, Balance, LastModified)

VALUES (p\_CustomerID, p\_Name, p\_DOB, p\_Balance, SYSDATE);

COMMIT;

EXCEPTION

WHEN CustomerExists THEN

DBMS\_OUTPUT.PUT\_LINE('Error: Customer with ID ' || p\_CustomerID || ' already exists.');

ROLLBACK;

WHEN OTHERS THEN

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

ROLLBACK;

END;

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