

- **Scenario 1**

```
CREATE OR REPLACE PROCEDURE SafeTransferFunds (  
    p_from_account_id IN NUMBER,  
    p_to_account_id IN NUMBER,  
    p_amount IN NUMBER  
)  
IS  
    insufficient_funds EXCEPTION;  
    v_from_balance NUMBER;  
BEGIN  
    SELECT Balance INTO v_from_balance FROM Accounts WHERE AccountID = p_from_account_id FOR  
    UPDATE;  
  
    IF v_from_balance < p_amount THEN  
        RAISE insufficient_funds;  
    END IF;  
  
    -- Deduct from sender  
    UPDATE Accounts  
    SET Balance = Balance - p_amount,  
        LastModified = SYSDATE  
    WHERE AccountID = p_from_account_id;  
  
    -- Add to receiver  
    UPDATE Accounts  
    SET Balance = Balance + p_amount,  
        LastModified = SYSDATE  
    WHERE AccountID = p_to_account_id;  
  
    INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)  
    VALUES (Transactions_seq.NEXTVAL, p_from_account_id, SYSDATE, p_amount, 'Transfer-OUT');
```

```
INSERT INTO Transactions (TransactionID, AccountID, TransactionDate, Amount, TransactionType)
VALUES (Transactions_seq.NEXTVAL, p_to_account_id, SYSDATE, p_amount, 'Transfer-IN');
```

```
COMMIT;
```

```
EXCEPTION
```

```
WHEN insufficient_funds THEN
```

```
    ROLLBACK;
```

```
    DBMS_OUTPUT.PUT_LINE('Transfer Failed: Insufficient funds.');
```

```
WHEN OTHERS THEN
```

```
    ROLLBACK;
```

```
    DBMS_OUTPUT.PUT_LINE('Transfer Failed: ' || SQLERRM);
```

```
END;
```

```
/
```

- **Scenario 2**

```
CREATE OR REPLACE PROCEDURE UpdateSalary (  
    p_employee_id IN NUMBER,  
    p_percentage IN NUMBER  
)  
IS  
    v_salary Employees.Salary%TYPE;  
BEGIN  
    -- Check existence  
    SELECT Salary INTO v_salary FROM Employees WHERE EmployeeID = p_employee_id;  
  
    -- Update salary  
    UPDATE Employees  
    SET Salary = Salary + (Salary * p_percentage / 100)  
    WHERE EmployeeID = p_employee_id;  
  
    DBMS_OUTPUT.PUT_LINE('Salary updated successfully.');
```

EXCEPTION

```
    WHEN NO_DATA_FOUND THEN  
        DBMS_OUTPUT.PUT_LINE('Error: Employee ID ' || p_employee_id || ' does not exist.');
```

WHEN OTHERS THEN

```
        DBMS_OUTPUT.PUT_LINE('Error updating salary: ' || SQLERRM);  
END;  
/
```

- **Scenario 3**

```
CREATE OR REPLACE PROCEDURE AddNewCustomer (  
    p_customer_id IN NUMBER,  
    p_name        IN VARCHAR2,  
    p_dob         IN DATE,  
    p_balance     IN NUMBER  
)  
IS  
BEGIN  
    -- Try to insert  
    INSERT INTO Customers (CustomerID, Name, DOB, Balance, LastModified)  
    VALUES (p_customer_id, p_name, p_dob, p_balance, SYSDATE);  
  
    DBMS_OUTPUT.PUT_LINE('Customer added successfully.');
```

EXCEPTION

```
    WHEN DUP_VAL_ON_INDEX THEN  
        DBMS_OUTPUT.PUT_LINE('Error: Customer ID ' || p_customer_id || ' already exists.');
```

WHEN OTHERS THEN

```
        DBMS_OUTPUT.PUT_LINE('Error adding customer: ' || SQLERRM);  
END;  
/
```