**PLSQL Exercise-3**

**Stored Procedure**

A **stored procedure** is a **named PL/SQL block** stored in the Oracle database that can be called and executed repeatedly.

It performs **a specific task** and can accept **parameters (IN, OUT, IN OUT)**.

**Syntax of a Stored Procedure**

CREATE OR REPLACE PROCEDURE procedure\_name (

param1 IN datatype,

param2 OUT datatype

) IS

BEGIN

-- Procedure logic

EXCEPTION

WHEN OTHERS THEN

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

END;

/

**Types of Parameters**

1. **IN**

Passes values into the procedure

Example- num1 IN NUMBER

1. **OUT**

Returns value from the procedure

Example- result OUT NUMBER

1. **IN OUT**

Passes in and returns a modified value

Example- value IN OUT NUMBER

**Example 1: Simple Stored Procedure**

**Procedure to Display a Message**

**Code:**

CREATE OR REPLACE PROCEDURE greet\_user IS

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Hello from Stored Procedure!');

END;

/

**To Call:**

BEGIN

greet\_user;

END;

/

**OUTPUT**



**Example 2: Procedure with IN Parameter**

**Code:**

CREATE OR REPLACE PROCEDURE display\_square (

num IN NUMBER

) IS

sq NUMBER;

BEGIN

sq := num \* num;

DBMS\_OUTPUT.PUT\_LINE('Square is: ' || sq);

END;

/

**To Call:**

BEGIN

display\_square(7);

END;

/

**OUTPUT**

****

**Example 3: Procedure with OUT Parameter**

**Code:**

CREATE OR REPLACE PROCEDURE calc\_cube (

num IN NUMBER,

result OUT NUMBER

) IS

BEGIN

result := num \* num \* num;

END;

/

**To Call:**

DECLARE

res NUMBER;

BEGIN

calc\_cube(3, res);

DBMS\_OUTPUT.PUT\_LINE('Cube is: ' || res);

END;

/

**OUTPUT**

****

**Example 4: Procedure with IN OUT Parameter**

**Code:**

CREATE OR REPLACE PROCEDURE double\_value (

num IN OUT NUMBER

) IS

BEGIN

num := num \* 2;

END;

/

**To Call:**

DECLARE

mynum NUMBER := 10;

BEGIN

double\_value(mynum);

DBMS\_OUTPUT.PUT\_LINE('Doubled value is: ' || mynum);

END;

/

**OUTPUT**

