



Name: Bongu Hari Hara Charan

Roll no: 323103310032

Branch: CSE-1

Semistor: 3

Professor: Lakshmi Aparna Sreepada

Links:





1. Find the Minimum of Two Numbers Using Procedures

```
CREATE OR REPLACE PROCEDURE find min(x IN NUMBER, y IN NUMBER, min OUT
NUMBER) IS
BEGIN
   IF x < y THEN
     min := x;
  ELSE
      min := y;
  END IF;
END;
-- Call the procedure
DECLARE
  result NUMBER;
BEGIN
   find min(10, 20, result);
   DBMS OUTPUT.PUT LINE('Minimum is: ' || result);
END;
```

```
SQL> CREATE OR REPLACE PROCEDURE find_min(x IN NUMBER, y IN NUMBER, min OUT NUMBER) IS

2    BEGIN

3    IF x < y THEN
4    min := x;
5    ELSE
6    min := y;
7    END IF;
8    END;
9  /

Procedure created.

SQL> SET SERVEROUTPUT ON;
SQL> DECLARE
2    result NUMBER;
3    BEGIN
4    find_min(10, 20, result);
5    DBMS_OUTPUT.PUT_LINE('Minimum is: ' || result);
6    END;
7    /
Minimum is: 10

PL/SQL procedure successfully completed.

SQL>
```

2. Insert Values into a Table Using Procedures

```
CREATE OR REPLACE PROCEDURE insert_into_table(emp_id IN NUMBER, emp_name IN
VARCHAR2) IS
BEGIN
    INSERT INTO employees (id, name) VALUES (emp_id, emp_name);
END;
/
SET SERVEROUTPUT ON;
BEGIN
    insert_into_table(1, 'Charan');
END;
//
```

```
SQL> CREATE OR REPLACE PROCEDURE insert_into_table(emp_id IN NUMBER, emp_name IN VARCHAR2) IS

2 BEGIN
3 INSERT INTO employees (id, name) VALUES (emp_id, emp_name);
4 END;
5 /

Procedure created.

SQL> SET SERVEROUTPUT ON;
SQL> BEGIN
2 insert_into_table(1, 'Charan');
3 END;
4 /

PL/SQL procedure successfully completed.

SQL> select * from employees;

ID NAME

ID NAME

I Charan

SQL> |
```

3. Exception Handling: Zero Error

```
BEGIN

DECLARE

num NUMBER := 10;
denom NUMBER := 0;
result NUMBER;

BEGIN
    result := num / denom;
EXCEPTION
    WHEN ZERO_DIVIDE THEN
        DBMS_OUTPUT.PUT_LINE('Error: Division by zero is not allowed.');
END;

END;
//
```

```
SQL> SET SERVEROUTPUT ON;
SQL> BEGIN

2 DECLARE
3 num NUMBER := 10;
4 denom NUMBER;
6 BEGIN
7 result := num / denom;
8 EXCEPTION
9 WHEN ZERO_DIVIDE THEN
10 DBMS_OUTPUT.PUT_LINE('Error: Division by zero is not allowed.');
11 END;
12 END;
13 /
Error: Division by zero is not allowed.

PL/SQL procedure successfully completed.

SQL>
```

4. Find Factorial Using Functions

```
CREATE OR REPLACE FUNCTION factorial(n IN NUMBER) RETURN NUMBER IS
  fact NUMBER := 1;
BEGIN
  FOR i IN 1..n LOOP
    fact := fact * i;
  END LOOP;
  RETURN fact;
END;
/-- Call the function
BEGIN
    DBMS_OUTPUT.PUT_LINE('Factorial: ' || factorial(5));
END;
//
```

```
SQL> SET SERVEROUTPUT ON
SQL> CREATE OR REPLACE FUNCTION factorial(n IN NUMBER) RETURN NUMBER IS

2     fact NUMBER := 1;
3     BEGIN
4     FOR i IN 1..n LOOP
5     fact := fact * i;
6     END LOOP;
7     RETURN fact;
8     END;
9     /

Function created.

SQL> -- Call the function
SQL> BEGIN
2     DBMS_OUTPUT.PUT_LINE('Factorial: ' || factorial(5));
3     END;
4     //
Factorial: 120

PL/SQL procedure successfully completed.

SQL> |
```

5. Exception Handling: No Rows

```
BEGIN
    DECLARE
        v_name VARCHAR2(50);
BEGIN
        SELECT name INTO v_name FROM employees WHERE id = 100;
EXCEPTION
        WHEN NO_DATA_FOUND THEN
            DBMS_OUTPUT.PUT_LINE('Error: No rows found.');
END;
END;
//
```