**PRACTICAL NO 7**

**CREATING FUNCTION IN PL/SQL**

The PL/SQL Function is very similar to PL/SQL Procedure. The main difference between procedure and a function is, a function must always return a value, and on the other hand a procedure may or may not return a value. Except this, all the other things of PL/SQL procedure are true for PL/SQL function too.

PROGRAM:-

1. **WAP TO COMPUTE AND RETURN THE MAXIMUM VALUE.**

**DECLARE**

   a number;

   b number;

   c number;

**FUNCTION** findMax(x IN number, y IN number)

**RETURN** number

**IS**

    z number;

**BEGIN**

   IF x > y **THEN**

      z:= x;

**ELSE**

      Z:= y;

**END** IF;

**RETURN** z;

**END**;

**BEGIN**

   a:= 23;

   b:= 45;

  c := findMax(a, b);

  dbms\_output.put\_line(' Maximum of (23,45): ' || c);

**END**;

/

1. **WAP TO COMPUTE FACTORIAL OF A GIVEN NUMBER.**

**CREATE FUNCTION** fact1(x number)

**RETURN** number

**IS**

   f number;

**BEGIN**

   IF x=0 **THEN**

      f := 1;

**ELSE**

      f := x \* fact1(x-1);

**END** IF;

**RETURN** f;

**END**;

**DECLARE**

   num number;

   factorial number;

**BEGIN**

   num:=&num;

   factorial := fact1(num);

   dbms\_output.put\_line(' Factorial '|| num || ' is ' || factorial);

**END**;

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1. **WAP TO CREATE FUNCTION THAT COUNTS TOTAL NUMBER OF EMPLOYES FROM THE TABLE.**

CREATE TABLE CUSTOMER\_SAL(ID INTEGER, NAME VARCHAR2(20), SALARY INTEGER );

INSERT INTO CUSTOMER\_SAL VALUES(1,’SAHIL’,3000);

INSERT INTO CUSTOMER\_SAL VALUES (2,’RAHIL’,7000);

INSERT INTO CUSTOMER\_SAL VALUES (3,’SUBH’,5000);

INSERT INTO CUSTOMER\_SAL VALUES (4,’POOJA’,4000);

**CREATE** OR REPLACE **FUNCTION** totalCustomers

**RETURN** number **IS**

   total number(2) := 0;

**BEGIN**

**SELECT** count(\*) **into** total

**FROM** CUSTOMER\_SAL;

**RETURN** total;

**END**;

/

**DECLARE**

   c number(2);

**BEGIN**

   c := totalCustomers();

   dbms\_output.put\_line('Total no. of Customers: ' || c);

**END**;

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