

Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```
SET SERVEROUTPUT ON;
CREATE OR REPLACE FUNCTION factorial (n NUMBER)
RETURN NUMBER
IS
    fact NUMBER := 1;
BEGIN
    FOR i IN 1..n LOOP
        fact := fact * i;
    END LOOP;
    RETURN fact;
END;
/
DECLARE
    num NUMBER := 5;
    result NUMBER;
BEGIN
    result := factorial(num);
    DBMS_OUTPUT.PUT_LINE ('Factorial of ' || num || ' is ' || result);
END;
/
```

Program 2

Write a PL/SQL program using Procedures IN, INOUT, OUT parameters to retrieve the corresponding book information in library

```
SET SERVEROUTPUT ON;
CREATE OR REPLACE PROCEDURE get-book-info (p-book-id IN NUMBER,
p-book-name OUT VARCHAR2, p-author OUT VARCHAR2, p-price IN
OUT NUMBER) IS
BEGIN
    SELECT book-name, author, price INTO p-book-name, p-author,
p-price FROM library WHERE book-id = p-book-id;
    DBMS-OUTPUT.PUT-LINE ('Book Name:' || p-book-name);
    DBMS-OUTPUT.PUT-LINE ('Author:' || p-author);
    DBMS-OUTPUT.PUT-LINE ('Price:' || p-price);
EXCEPTION:
    WHEN NO-DATA-FOUND THEN
        DBMS-OUTPUT.PUT-LINE ('No book found with ID ' || p-book-id);
END;
/
DECLARE
    v-book-name VARCHAR2(50);
    v-author VARCHAR2(50);
    v-price NUMBER := 0;
    get-book-info ('101', v-book-name,
v-author, v-price);
    DBMS-OUTPUT.PUT-LINE ('Book
info Retrieved Successfully');
END;
```

Evaluation Procedure	Marks awarded
PL/SQL Procedure(5)	5
Program/Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	