

Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```
SET SERVEROUTPUT ON;
CREATE OR REPLACE FUNCTION factorial (IN 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 := 6;
    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

CREATE TABLE library(

book_id NUMBER PRIMARY KEY,
book_title VARCHAR2(100);
author_name VARCHAR2(100);
price NUMBER

);

INSERT INTO library VALUES (1,'Database Systems','Ramez Elmasri',600)

INSERT INTO library VALUES(2,'Operating Systems','Galvin',600);

INSERT INTO library VALUES(3,'Computer Networks','Andrew Tanenbaum')

CREATE OR REPLACE PROCEDURE

get_book_info(

p_book_id IN NUMBER,
p_book_title OUT VARCHAR2,
p_author_name OUT VARCHAR2,
p_price OUT NUMBER

)

IS

BEGIN.

SELECT book_title, author_name,
price.

INTO p_book_title, p_author_name
p_price

FROM library.

WHERE book_id = p_book_id;

EXCEPTION

WHEN NO_DATA_FOUND THEN

p_book_title := 'Book Not
Found';

p_author_name := NULL;
p_price := 0;

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