Ex.No.: 12		WORKING WITH CURSOR, PROCEDURES AND FUNCTION
Date:	26/11/24	

PROGRAM 1

FACTORIAL OF A NUMBER USING FUNCTION

```
CREATE OR REPLACE FUNCTION itfact (a NUMBER) RETURN NUMBER IS fact
NUMBER := 1;
b NUMBER; BEGIN
b := a;
WHILE b > 0 LOOP
fact := fact * b; b := b - 1;
END LOOP;
RETURN fact; END;
/
DECLARE
result NUMBER; BEGIN
result := itfact(7); -- Call the function with 7 as input DBMS_OUTPUT.PUT_LINE('The
factorial of 7 is ' || result);
END;
/
```

```
Function created.
```

```
The factorial of 7 is 5040

Statement processed.
```

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 INT PRIMARY KEY, book_name VARCHAR2(100), author_name
VARCHAR2(100)
);

INSERT INTO library VALUES (1, 'Introduction to PL/SQL', 'John Doe');
INSERT INTO library VALUES (2, 'Advanced SQL', 'Jane Smith');

CREATE OR REPLACE PROCEDURE get_book_info ( p_book_id IN INT,
p_book_name IN OUT VARCHAR2, p_author_name OUT VARCHAR2
) IS BEGIN
SELECT book_name, author_name
INTO p_book_name, p_author_name FROM library
WHERE book_id = p_book_id;

p_book_name := p_book_name || ' - Updated';
END;
/

DECLARE
v_book_name VARCHAR2(100); v_author_name VARCHAR2(100);
BEGIN
v_book_name := 'Sample Book'; -- Initial value
get_book_info(1, v_book_name, v_author_name); -- Fetch book info for ID 1
DBMS_OUTPUT.PUT_LINE('Book Name: ' || v_book_name); -- Output modified book
name DBMS_OUTPUT.PUT_LINE('Author Name: ' || v_author_name); -- Output author
name
END;
/
```

```
Book Name: Introduction to PL/SQL - Updated
Author Name: John Doe

Statement processed.
```