

Ex.No.: 12	PL SQL PROGRAMS
Date: 01/10/2024	

Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```

DECLARE
n NUMBER := 10;
result NUMBER;

FUNCTION itfact(num NUMBER) RETURN NUMBER IS fact NUMBER := 1;
BEGIN
FOR i IN 1..num LOOP fact := fact * i;
END LOOP;
RETURN fact;
END;

BEGIN
result := itfact(n);
DBMS_OUTPUT.PUT_LINE('The factorial of ' || n || ' is ' || result); END;

```

Results	Explain	Describe	Saved SQL	History
The factorial of 10 is 3628800 Statement processed. 0.01 seconds				

Program 2

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

```

CREATE OR REPLACE PROCEDURE book_info( p_book_id IN NUMBER, p_author OUT
VARCHAR2, p_title OUT VARCHAR2,
p_published_date OUT DATE
) AS

```

```

BEGIN
SELECT author, title, published_date
INTO p_author, p_title, p_published_date
FROM books
WHERE book_id = p_book_id;

EXCEPTION
WHEN NO_DATA_FOUND THEN p_author := NULL; p_title := NULL;
p_published_date := NULL;
WHEN OTHERS THEN
RAISE; END book_info;

DECLARE v_author VARCHAR2(100); v_title VARCHAR2(100); v_published_date DATE;
v_book_id NUMBER := 1; BEGIN book_info(v_book_id, v_author, v_title,
v_published_date);

IF v_author IS NOT NULL THEN
DBMS_OUTPUT.PUT_LINE('Book ID: ' || v_book_id);
DBMS_OUTPUT.PUT_LINE('Author: ' || v_author);
DBMS_OUTPUT.PUT_LINE('Title: ' || v_title);
DBMS_OUTPUT.PUT_LINE('Published Date: ' || TO_CHAR(v_published_date, 'YYYY-
MM-DD'));
ELSE
DBMS_OUTPUT.PUT_LINE('No book found with ID: ' || v_book_id); END IF;
END;

```

```

Book ID: 1
Author: William Shaespeare
Title: Hamlet
Published Date: 1590-12-12

```

```
Statement processed.
```

```
0.02 seconds
```