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Date:	01/10/2024	PL SQL PROGRAMS

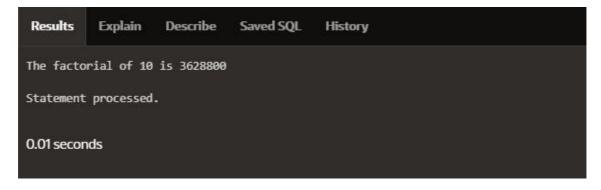
Program 1

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;
```



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
```

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```
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:\ '\parallel 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
```

```
Book ID: 1
Author: William Shaespeare
Title: Hamlet
Published Date: 1590-12-12
Statement processed.

0.02 seconds
```

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