Ex.No.: 12		WORKING WITH CURSOR, PROCEDURES AND FUNCTIONS
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Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```
create or replace function fact (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
a number(2);
f number(10);
begin
a := :n ;
f:=fact(a);
dbms_output.put_line('The factorial is '||f);
end;
/
```

Input : 5

```
The factorial is 120
```

Program 2

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

```
--PROCEDURE FOR IN PARAMETER

create procedure proc(a in number) is bprice number;
begin
select price into bprice from library where book_id=a;
dbms_output.put_line('The price of the book is '||bprice);
end;

declare
a number(2);
begin
a := :n;
proc(a);
end;
```

Input: 5

```
The price of the book is 9.75
```

```
--PROCEDURE FOR OUT PARAMETER

create or replace procedure proc(a in number,n out number) is
begin
select publication_year into n from library where book_id=a;
end;

declare
a number(2);
n number(4);
begin
a := :b;
proc(a,n);
dbms_output.put_line('The year of publication of the book is '||n);
end;
```

Input 7

```
The year of publication of the book is 1951
```

```
--PROCEDURE FOR INOUT PARAMETER

create or replace procedure proc(a in out number) is
begin
a:=a+10;
end;

declare
a number(2);
id number(2);
begin
id := :b;
select price into a from library where book_id=id;
proc(a);
dbms_output.put_line('The updated price of the book is '||a);
end;
```

Input 3

```
The updated price of the book is 23
```