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

AIM:

Create PL/SQL Blocks to perform the Item Transaction Operations using CURSOR, FUNCTION and PROCEDUERE.

ALGORITHM:

STEP-1: Start.

STEP-2: Create two tables Item Master and Item Trans.

itemmaster(itemid , itemname, stockonhand)

itemtrans(itemid ,itemname ,dateofpurchase ,quantity)

STEP-3: Create a PROCEDURE with id, name and quantity as parameters which make a call to the FUNCTION by passing id, name, dop, and quantity as parameters dop is set as sysdate.

STEP-4: Using FUNCTION fetch each record from the table Item Master using CURSOR inside a Loop statement,

If Item Master's ItemId is equal to the entered ID value then exit the loop otherwise fetch the next record.

```
loop
        fetch master into masterrec
        exit when master%notfound
        if masterrec.itemid=id then
  exit;
 end if;
end loop;
```

STEP-5: If Itemmaster's itemid = id then,

Add the Itemmaster's stockonhand with the given quantity and update the ItemMaster table and insert the Item information into the ItemTrans table.

STEP-6: Else, if the inputed item is not present in the ItemMaster table then insert the

Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```
create or replace function cal_func(n number)
    Return number IS fac number := 1;
BEGIN
    If n=0 OR n=1 Then
      return fac;
   Else
      for i IN 1..n loop
        fac := fac + i;
    END LOOP;
    Return fac;
    END IF;
END cal_func;
Declare
      num number := 5;
      result NUMBER;
BEGIN
      result := cal_fac (num);
      DBMS_OUTPUT.PUT-LINE (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 varchar ;
    p_avail book IN OUT Number :) IS
BEGIN
    select author, avai loop from library_books
where book id = p_book_id
    If p_avail_loop := p_avail_loop -1 ;
  Else
    DBMS_OUTPUT.PUTLINE ("No available copies");
END If ;
```

TO WRITE A PL/SQL BLOCK TO DISPLAY THE EMPLOYEE ID AND EMPLOYEE NAME WHERE DEPARTMENT NUMBER IS 11 USING EXPLICIT CURSORS

```
1  declare
2  cursor cenl is select eid,sal from ssempp where dno=11;
3  ecode ssempp.eid%type;
4  esal empp.sal%type;
5  begin
6  open cenl;
7  loop
8  fetch cenl into ecode,esal;
9  exit when cenl%notfound;
10 dbms_output.put_line(' Employee code and employee salary are' || ecode 'and'|| esal);
```

```
 11  end loop;
 12  close cenl;
 13* end;

SQL> /
Employee code and employee salary are 1 and 39000
Employee code and employee salary are 5 and 35000
Employee code and employee salary are 6 and 23000

PL/SQL procedure successfully completed.
```

TO WRITE A PL/SQL BLOCK TO UPDATE THE SALARY BY 5000 WHERE THE JOB IS LECTURER , TO CHECK IF UPDATES ARE MADE USING IMPLICIT CURSORS AND TO DISPLAY THE UPDATED TABLE

```
SQL> declare
  2  county number;
  3  begin
  4  update ssempp set sal=sal+10000 where job='lecturer';
  5  county:= sql%rowcount;
  6  if county > 0 then
  7  dbms_output.put_line('The number of rows are '|| county);
  8  end if;
  9  if sql %found then
 10  dbms_output.put_line('Employee record modification successful');
 11  else if sql%notfound then
 12  dbms_output.put_line('Employee record is not found');
 13  end if;
 14  end if;
 15  end;
 16  /
The number of rows are 3

Employee record modification successful

PL/SQL procedure successfully completed.

SQL> select * from ssempp;
```

EID	ENAME	JOB	SAL	DNO
1	nala	lecturer	44000	11
2	kala	seniorlecturer	20000	12
5	ajay	lecturer	40000	11
6	vijay	lecturer	28000	11
3	nila	professor	60000	12