

### Program 1

#### FACTORIAL OF A NUMBER USING FUNCTION

Create or replace function factorial-func (p-num IN NUMBER)

return NUMBER

is

v-result number := 1; (local variable)

Begin

If p-num < 0 THEN

Raise-application-error (-20001, 'Factorial is not defined for negative numbers!');

else if p-num = 0 THEN

v-result := 1;

else

v-result := p-num \* factorial-func (p-num - 1);

end if;

return v-result;

END;

Declare

v-input-number NUMBER := 5;

v-factorial-result NUMBER;

Begin

v-factorial-result := factorial-func (v-input-number);

DBMS-OUTPUT-PUT-LINE ("The factorial of '|''v-input-no'|''

|' is '|''v-factorial-result|'");

END;

## Program 2

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

Create table books(book\_id NUMBER PRIMARY KEY,  
title VARCHAR2(100), author VARCHAR2(100));

Insert into books (book\_id, title, author) values (1, 'Alchemist',  
'Paulo Coelho');

Insert into books (book\_id, title, author) values (2, 'To Kill  
Mockingbird',  
'Harper Lee');

Commit;

Declare

v\_book\_id NUMBER := 2;

v\_title books.title %TYPE;

v\_author book.author %TYPE;

v\_message VARCHAR2(200) := 'Initial message.';

Begin

getbook\_info

p\_book\_id > v\_book\_id,

p\_title > v\_title

p\_author > v\_author

p\_message > v\_message

);

END;

Evaluation Procedure	Marks awarded
PL/SQL Procedure(5)	5
Program/Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	