

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;

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 books.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	