

Program 1

FACTORIAL OF A NUMBER USING FUNCTION

1) create or replace function get-factorial (n in number)
return number
is

v_fact number := 1;

begin

for i in 1.. n loop

v_fact := v_fact * i;

end loop;

return v_fact;

end;

/ set serveroutput on;

declare

v_num number := 5;

v_result number;

begin

v_result := get-factorial (v_num);

DBMS_output.put_line ('factorial of ' || v_num || ' is ' || v_result);

end;

/

2) create table library-books (bookid number primary key,
title varchar2(100), author varchar2(100), check-count
number default 0);

insert into library-books (bookid, title, author) values
(101, 'The Hobbit', 'J.R.R. Tolkien');

insert into library-books (book-id, title, author) values
(102, '1984', 'George Orwell');

commit;

create or replace procedure get-book-info

(p_book_id (input - book id in number,

Program 2

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

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[span-1] (start-span) p-title out varchar2,
[span-2] (start-span) p-author out varchar2,
book [span-3] (start-span) p-times-checked-out in out number)
is
begin
    select title, author, checkout-count
    into p-title p-author, p-times-checked-out
    from library.books
    where book-id = p-book-id;
    p-times-checked-out := p-times-checked-out + 1;
    update library-books set checkout-count = p-times-checked-out
    where book-id = p-book-id;
    commit;
exception
    when no-data-found then
        p-title := 'book not found';
        p-author := 'N/A';
    end;

```

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

```

set serveroutput on;
declare
    v-id number := 101;
    v-title varchar2(100);
    v-author varchar2(100);
    v-checkouts number := 0;
begin
    get-book-info(v-id, v-title, v-author, v-checkouts);
    dbms_output.put_line('Title: ' || v-title);
    dbms_output.put_line('author: ' || v-author);
    dbms_output.put_line('total checkouts: ' || v-checkouts);
end;

```