Aim :

To implement PL/SQL Procedures, functions and loops on Number theory and business scenarios.

Procedure :

PL/SQL is a combination of SQL along with the procedural features of programming languages. It was developed by Oracle corporation in the early 90's to enhance the capabilities of SQL. PL/SQL is one of three key programming languages embedded in the Oracle Database, along with SQL itself and Java.

Sections & Description

Declaration:

This section starts with the keyword DECLARE. It is an optional section and defines all variables, cursors, subprograms, and other elements to be used in the program.

Execu

This section is enclosed between the key words 'Begin' and 'End' and it is a mandatory section. it its consist of executable PL/SQL statements of the program. It should have at least one executable line of code. which may be just a NULL comand to indicate that nothing should be execued.

Exception Handling:

this section starts with the key word Exception. this optional section contains exception that handle errors in the program.

Simple program to print a sentence

Syntax

```
DECLARE
    <declarations section>
BEGIN
    <executable command(s)>
EXCEPTION
    <exception handling>
END;
```

Program :

```
  DECLARE
   message varchar2(20):= "[illegible]";
  BEGIN
   dbms.output.put_line (message);
  END
```

Input :

```
set serveroutput on;
declare
 x number(5);
 y number(5);
 z number(4);
 begin
  x := 10;
  y := 12;
  z := x+y
  dbms_output.put_line("sum is" ||z);
  end;
```

Output
 sum is 22

```
 DECLARE
     hid number(3) := 100;
 BEGIN
     If ( hid =10) then
     dbms_output.put_line ('value of
 hid is 10');
      ElsIF (hid =20) then
      dms_ouput.put_line ('value of
 hid is 20')
     ElsIF( hid = 30) then
```

```
  dbms-output.putline('value of hid is
30');
  ELSE
   dbms-output.put.line('None of the
values is matching");
 END IF;
 dbms-output.putline('Exact value
of hid is:" ||hid);
END;
/
```

output

```
None of the value is matching
Exact value of hid is :100
```

Sample program for only procedure

```
create or replace function csinformation
(c-id in number, c-name in varchar2)
is
 begin
dbms-output.put-line('ID:'||cid);
dbms-output.put-line('Name:'||c-name);
 end;
 /
Procedure created
 exec csinformation(101,'ram');
 PL/SQL procedure successfully
 completed.
 set serveroutput on
 exec csinformation (101,'ram');
```

ID: [illegible]

Name : Ram

Sample program for only function

```
create or replace function csinformation2
(c_id in number, c_name in varchar2)
Return varchar2
IS
Begin
If c_id > 200 then
Return ('no booking available');
Else
Return (' booking open');
End if ;
End
;
Function created
mesg varchar2 (200)
begin
mesg : = csinformation2 (102, "ram");
dbms_output.put_line (mesg);
end;
;
vehicle available
```

VEL TECH - CSE	
EX NO.	7
PERFORMANCE (5)	6
RESULT AND ANALYSIS (5)	3
VIVA VOCE (5)	4
RECORD (5)	1
TOTAL (20)	14
SIGN WITH DATE	

Result:

Thus excecuted PL/SQL Procedure, functions and loop on Number theory and business senarios.

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