

27/4/24

Task 7: PL/SQL procedures for loops, functions

Aim:- To implement PL/SQL procedures, functions, and loops on number theory and business procedure:-

PL/SQL is a condition of SQL along with the procedural features of programming language. It was developed by Oracle Corporation in the early 90's to enhance the capability of SQL.

Sections & Definition

1. Declaration:

This section starts with the keyword **DECLARE**. It is an optional section and defines all variables.

2. Executable

This section is enclosed between the keywords **BEGIN** and **END** and is a mandatory section. It contains executable PL/SQL statements of the program.

3. Exception Handling

This section starts with the keyword **EXCEPTION**. Simple program to print a sentence.

Syntax:

DECLARE

< declaration section >

BEGIN

< Executable Command(s) >

Exception

<exception handling>

END;

Program:

DECLARE:

message varchar(255) := 'booking closed';

BEGIN

dbms_output.put_line(message);

END;

state input:

SQL > set serveroutput on

SQL > declare

2 x number(5);

3 y number(5);

4 z number(9);

5 begin

6 x := 10;

7 y := 12;

8 z := x + y;

9 dbms_output.put_line('sum is 22');

10 end;

11 /

sum is 22

PL/SQL procedure successfully completed

Dynamic input:

set serveroutput on;

declare

x number(5);

y number(5);

z number(9);

begin

x := 10;

y := 12;

z number x + y;

```
dbms - output - line ('sum is ' || 112);  
end;  
/
```

```
SQL > declare  
2   var 1 integer;  
3   var 2 integer;  
4   var 3 integer;  
5   begin  
6   var 1 := 20;  
7   var 2 := 10;  
8   var 3 := var 1 + var 2;  
9   dbms_output.put_line (var 3);  
10  end;  
11  /
```

Enter value for var 1: 20

old 6: var 1 = 10;

new 6: var 1 = 20;

Enter value for var 2: 10

old 7: var 2 = 10;

new 7: var 2 = 10;

SQL

PL/SQL procedure successfully completed.

DECLARE

hid number (3) := 100;

BEGIN

IF (hid = 10) THEN

dbms_output.put_line ('value of hid is 10');

ELSIF (hid = 20) THEN

dbms_output.put_line ('value of hid is 20');

ELSIF (hid = 30) THEN

dbms_output.put_line ('value of hid is 30');

END IF

dbms_output.put_line('none of value is match')
END IF;

dbms_output.put_line('Exact value of h.d is :
"h.d");

none of value is matching
Exact value of h.d is : 100

PL/SQL procedure successfully completed
sample program for only function :-

SQL > create or replace function c_information
(h_id) in number ; c_name in varchar2)
return varchar2

is

begin

if c_id > 200 then

return c'no booking available';

else

return c'booking present';

end if;

end;

function created.

SQL > declare

2 msg varchar2(200);

3 begin

4 msg := c_information(206, 'room');

5 dbms_output.put_line(msg);

6 end;

7 /

no value available

PL/SQL procedure successfully completed

VEL TECH	
EX NO.	7
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	6
RECORD (5)	
TOTAL (20)	16
SIGN WITH DATE	23/9/20

Result:- Thus, implementation of PL/SQL
 procedure for loops and function been
 successfully completed.