

Task 7(a) 23/09/25 Task 7 : PL/SQL Procedure for loops

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 of SQL-PL/SQL is one, three key programming languages embedded in Oracle database, along with SQL itself and Java.

6 Simple program to print a sentence :-

Syntax :-
DECLARE
 < declaration section >
BEGIN
 < executable section >
EXCEPTION
 < exception handling >
END;

Program :

```
DECLARE
    message varchar(20) := 'booking closed';
BEGIN
    dbms_output.put_line(message);
END;
```

Dynamic Input :

```
set serveroutput on;
declare
    x number(6);
    y number(5);
    z number(9);
```

```
begin
    x := 10;
    y := 12;
    z := x + y;
```

```
dbms_output.put_line ('sum is '||z);  
end;
```

Output : Sum is 22

declare

Var 1 integer;

Var 2 integer;

Var 3 integer;

begin

Var 1 := & Var 1;

Var 2 := & Var 2;

Var 3 := Var 1 + Var 2;

dbms_output.put_line (Var 3);

end;

Enter values for Var 1 : 20

old 6 : Var 1 := & Var 1;

new 6 : Var 1 := 20;

Enter value for Var 2 : 30

old 7 : Var 2 := & Var 2;

new 7 : Var 2 := 30;

50

Declare

hid Number (3) := 100;

Begin

if (hid = 10) then

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

else if (hid = 20) then

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

else if (hid = 30) then

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

else

dbms_output.put_line ('None of the values is matching');

End if ;

dbms_output.put_line ('Exact value of hid is : '||hid);

END;

Output:

None of the value is matching
exact value of hid is : 100

Declare

hid number(1);
old number(1);

Begin

<<outer.loop>>

for hid in 1...3 loop

<<inner loop>>

for old in 1...3 loop

dbms_output.put_line('hid is : '||hid|| ' and old is : '||old);

end loop inner-loop;

End loop outer-loop;

end;

/

Output:

hid is : 1 and old is : 1

hid is : 1 and old is : 2

hid is : 1 and old is : 3

hid is : 2 and old is : 1

hid is : 2 and old is : 2

hid is : 2 and old is : 3

hid is : 3 and old is : 1

hid is : 3 and old is : 2

hid is : 3 and old is : 3

Program for only procedure:

create or replace procedure csinformation

(c-id in number, c-name in varchar2)

is

begin

dbms_output.put_line('ID: '||c-id);

dbms_output.put_line('Name: '||c-name);

end;

/

Procedure created

exec cs information (100, 'ram');

PL/SQL Procedure Successfully completed.

Set server output on;

exec cs information (101, 'raam');

ID 101

Name : raam

Program:

create or replace function cs information
(h.id in number, c.name in varchar2)

Return varchar 2

Is

Begin

if (id > 200 then

Return ('no booking available');

Else

Return ('booking ope');

end if ;

End;

function created.

declare

msg varchar 2(200);

begin

msg := cs information (102, 'room');

dbms_output.put_line (msg);

end ;

/

Vehicle available

declare

msg varchar 2(200);

begin

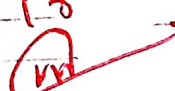
msg := cs information (206, 'room');

dbms_output.put_line (msg);

end;

/

No vehicle available.

VEL TECH	
EX NO.	7
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	3
VIVA VOCE (5)	5
RECORD (5)	1
TOTAL (20)	15
SIGN WITH DATE	

Result:

Thus the implementation PL/SQL procedures functions c
loops on number theory and business scenerios comple

23/9/23

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PL/SQL Procedure for loops

Aim:- To implement PL/SQL programs using loops for printing Prime number Customer IDs and for demonstrating loop control in different scenarios.

Procedure:-

1. Start a PL/SQL block or procedure
2. Use a cursor to fetch customer ID from a table.
3. For each ID, check whether it is a prime number using a loop.
4. Use for loop / while loop to demonstrate prime number checking
5. Print the result using DBMS-output.put-line.
6. End the block.

create or replace procedure print prime Customer is

cursor cust-cur is

select customer_id from customers;

v-id number;

v-is-prime Boolean;

v-i number;

BEGIN.

open cust-cur;

loop

fetch cust-cur into v-id;

Exit when cust-cur % Not found;

IF v-id < 2 then

v-is-prime = false;

Else

v-is-prime := True;

v-i := 2;

while v-i <= trunc(sqrt(v-id)) loop

IF mod(v-id, v-i) = 0 THEN

v-is-prime := false

Exit;

ENDIF;

v-i := v-i + 1;

END LOOP;

ENDIF;

IF v-is-prime THEN

DBMS-output.put-line ('Prime customer ID: ' || v-id

END IF;

END loop;

close cust-cur;

END;

Create or replace Procedure Print first-n-prime
(n Number) is

V-num- number := 2;

V-count-number := 0;

V-is-prime Boolean;

Begin

while V-count < n loop

V-is-prime := True;

For i IN 2..TRUNC(SQRT(V-num)) loop

V-count := V-count + 1;

End IF;

V-num := V-num + 1;

End loop;

END;

VEL TECH	
EX NO.	7
PERFORMANCE (5)	6
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	8
RECORD (5)	-
TOTAL (20)	19
SIGN WITH DATE	23/9/15

Result:

The implementation of PL/SQL programs using for
ops for printing prime number customers was
successfully completed.