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DDL WORKSHEET-XII

I. Write a pl/sql block for the addition of two numbers.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> set serveroutput on;
SQL> declare
  2 x number(5);
  3 y number(5);
  4 z number(7);
  5 begin
  6 x := &x;
  7 y := &y;
  8 z := x+y;
  9 dbms_output.put_line('Sum is' || z);
 10 end;
 11 /
Enter value for x: 10
old 6: x := &x;
new 6: x := 10;
Enter value for y: 20
old 7: y := &y;
new 7: y := 20;
Sum is30
PL/SQL procedure successfully completed.
```

II. Write a pl/sql block for doing various arithmetic operations.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> set serveroutput on;
SQL> declare
  2 x number(5);
  3 y number(5);
  4 z number(7);
  5 begin
  6 x := &x;
  7 y := &y;
  8 z := x+y;
  9 dbms_output.put_line('Sum is' || z);
 10 end;
 11 /
Enter value for x: 10
old 6: x := &x;
new 6: x := 10;
Enter value for y: 20
old 7: y := &y;
new 7: y := 20;
Sum is30
PL/SQL procedure successfully completed.
```

III. Write a pl/sql block to find the maximum among 3 numbers.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
  2 a number(5);
  3 b number(5);
  4 c number(5);
  5 begin
  6 a := &a;
  7 b := &b;
  8 c := &c;
  9 if (a>b) and (a>c)
 10 then
 11 dbms_output.put_line(a || ' is the greatest');
 12 elsif (b>a) and (b>c)
 13 then
 14 dbms_output.put_line(b || ' is the greatest');
 15 else
 16 dbms_output.put_line(c || ' is the greatest');
 17 end if;
 18 end;
 19 /
Enter value for a: 20
old 6: a := &a;
new 6: a := 20;
Enter value for b: 10
old 7: b := &b;
new 7: b := 10;
Enter value for c: 30
old 8: c := &c;
new 8: c := 30;
30 is the greatest
PL/SQL procedure successfully completed.
```

IV. Write a pl/sql block to find the sum of natural numbers using control structure.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
2  i integer;
3  s integer;
4  begin
5  s :=0;
6  for i in 1..10 loop
7  s:=s+i;
8  end loop;
9  dbms_output.put_line('Sum = '||s);
10 end;
11 /
Sum = 55

PL/SQL procedure successfully completed.
```

V. Write a pl/sql block to find the factorial of a given number using function.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
2  i integer;
3  s integer;
4  begin
5  s :=0;
6  for i in 1..10 loop
7  s:=s+i;
8  end loop;
9  dbms_output.put_line('Sum = '||s);
10 end;
11 /
Sum = 55

PL/SQL procedure successfully completed.
```

VI. Write a pl/sql block to generate even and odd numbers using control structures.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
2  n number(5);
3  r number(5);
4  begin
5  n := &n;
6  r := MOD(n,2);
7  if r =0 then
8  dbms_output.put_line('Even');
9  else
10 dbms_output.put_line('Odd');
11 end if;
12 end;
13 /
Enter value for n: 20
old 5: n := &n;
new 5: n := 20;
Even

PL/SQL procedure successfully completed.
```

VII. Write a pl/sql block to generate Fibonacci series using procedure.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
2  first number:=0;
3  second number:=1;
4  third number;
5  n number:=&n;
6  i number;
7
8  begin
9  dbms_output.put_line('Fibonacci series is:');
10 dbms_output.put_line(first);
11 dbms_output.put_line(second);
12
13 for i in 2..n
14 loop
15 third:=first+second;
16 first:=second;
17 second:=third;
18 dbms_output.put_line(third);
19 end loop;
20 end;
21 /
Enter value for n: 6
old 5: n number:=&n;
new 5: n number:=6;
Fibonacci series is:
0
1
1
2
3
5
8
PL/SQL procedure successfully completed.
```

VIII. Write a pl/sql block to compute the sum of series $1 + 1/x + 2/x^2 + 3/x^3 + \dots + n/n^n$

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
2  a number(5);
3  x number;
4  n number;
5  s float(5) :=1;
6  begin
7  x:=&x;
8  n:=&n;
9  a:=1;
10 loop
11 s:=s+(1/power(x,a));
12 exit when(a>n);
13 a:=a+1;
14 end loop;
15 dbms_output.put_line('Sum of Series is '|| s);
16 end;
17 /
Enter value for x: 2
old 7: x:=&x;
new 7: x:=2;
Enter value for n: 3
old 8: n:=&n;
new 8: n:=3;
Sum of Series is 2
PL/SQL procedure successfully completed.
```

IX. Write a PL/SQL block to update salaries of all the employees who work in dept 10 by 15% If none of the emp salary is updated, display the message “none of the salary updated”. otherwise display the total number of employees whose salary updated.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
  2 num number(5);
  3 begin
  4 update emp set sal=sal+sal*.15
  5 where deptno=3;
  6 if sql%notfound then
  7 dbms_output.put_line('No salaries Updated');
  8 elsif sql% found then
  9 num:=sql%rowcount;
 10 dbms_output.put_line('salary for ' ||num||' employees updated');
 11 end if;
 12 end;
 13 /
salary for 2 employees updated
PL/SQL procedure successfully completed.
```

X. Write a PL/SQL block to find the name and salary of first five highly paid salaries.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> declare
  2 cursor c1 is select ename,sal from emp
  3 order by sal desc;
  4 name varchar(20);
  5 salary number (20);
  6 i number;
  7 begin
  8 open c1;
  9 for i in 1..5
 10 loop
 11 fetch c1 into name, salary;
 12 dbms_output.put_line('Name: ' ||name||' Sal: ' ||salary);
 13 end loop;
 14 close c1;
 15 end;
 16 /
Name: Shubham Sal: 85000
Name: Roopu Sal: 80000
Name: Shreya Sal: 75000
Name: Kunal Sal: 73000
Name: Ritvick Sal: 70000
PL/SQL procedure successfully completed.
```