**ASSIGNMENT: 11**

**DATE:** 31/01/2019

**PROBLEM DEFINATION: WRITE A PL/SQL TO FIND AND DISPLAY THE SUM OF DIGITS IN A GIVEN NUMBER AND PRODUCT OF DIGITS IN A NUMBER.**

**ALGORITHM:**

STEP 1: START

STEP 2: read a and set r1=0 and r2=1 and n=a

STEP 3: find the length of a and put it on l

STEP 4: while a > 0

STEP 5: set b = a % 10

STEP 6: set r1 = r1 + b

STEP 7: set r2 = r2 \* b

STEP 8: set a = a / 10

( end loop )

STEP 9: print r1 and r2

STEP 10: END

**SOURCE CODE:**

set serveroutput on

Declare

a number;

b number;

n number;

l number;

r1 NUMBER;

r2 NUMBER;

Begin

a:=&a;

n:=a;

l:=length(a);

r1:=0;

r2:=1;

while a > 0 loop

b:=MOD(a,10);

r1:=r1+b;

r2:=r2\*b;

a:=trunc(a/10);

end loop;

dbms\_output.put\_line('THE SUM='||r1);

dbms\_output.put\_line('THE PRODUCT='||r2);

end;

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**OUTPUT:**

Enter value for a: 243

old 9: a:=&a;

new 9: a:=243;

THE SUM=9

THE PRODUCT=24

PL/SQL procedure successfully completed.

**DISCUSSION:**

1. In UNIX system we can implement addition of first n natural number by using the above source code.

2. We use “for loop” for perform the addition and multiplication.

3. We use “mod function” to cut the last digit.