**ASSIGNMENT: 12**

**DATE:** 31/01/2019

**PROBLEM DEFINATION: WRITE A PL/SQL TO FIND A NUMBER IS ARMSTRONG OR NOT.**

**ALGORITHM:**

STEP 1: START

STEP 2: read a and set r1=0 and p=0 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 p = p + power(b,l)

STEP 7: set a = a / 10

( end loop )

STEP 8: if p=n then

Print the number is Armstrong

else

Print the number is not Armstrong

STEP 9: END

**SOURCE CODE:**

set serveroutput on

Declare

a number;

b number;

p number;

n number;

l number;

Begin

a:=&a;

n:=a;

l:=length(a);

p:=0;

while a > 0 loop

b:=MOD(a,10);

p:=p+power(b,l);

a:=trunc(a/10);

end loop;

if(p=n)then

dbms\_output.put\_line('The number is armstrong');

else

dbms\_output.put\_line('The number is not armstrong');

end if;

end;

/

**OUTPUT:**

Enter value for a: 153

old 8: a:=&a;

new 8: a:=153;

The number is Armstrong

PL/SQL procedure successfully completed.

Enter value for a: 143

old 8: a:=&a;

new 8: a:=143;

The number is not Armstrong

PL/SQL procedure successfully completed.

**DISCUSSION:**

1. In UNIX system we can find the Armstrong number by using the above source code.

2. We use “for loop” for perform the operation.

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