

## Loops

### (Assignment Questions)

**Question 1 :** WAP to find the **Factorial** of a number entered by the user.

**Hint :** factorial of a number ( $n$ ) =  $n * (n-1) * (n-2) * (n-3) * \dots * 1$

and exists for positive numbers only. We write factorial as  $n!$

So, factorial of  $0! = 1$ ,  $1! = 1$ ,  $2! = 2$ ,  $3! = 6$ ,  $4! = 24$  and so on.

**Note -** Please do not confuse factorial with NOT EQUAL TO operator, they are not the same.

**Question 2 :** WAP to print the multiplication table of a number, entered by the user.

**Question 3 :** WAP to input a number and check whether the number is an **Armstrong** number or not.

An **Armstrong** number is a number that is equal to the sum of cubes of its digits.

**Question 4 :** For a positive N , WAP that prints all the prime numbers from 2 to N.  
(Assume  $N \geq 2$ )

**Question 5 :** For a positive N , WAP that prints the first N **Fibonacci** numbers.  
(Assume  $N \geq 2$ )

**Fibonacci** series : 0, 1, 1, 2, 3, 5, 8, 13, 21, 34 ....

This is a series where each number is a sum of previous 2 numbers in the series.

Eg :    **1** = 0 + 1,  
      **2** = 1 + 1,  
      **3** = 1 + 2,  
      **5** = 2 + 3,  
      **8** = 3 + 5 & so on.

ashika.mittal05@gmail.com