**ALGO TASK Week 2**



Note: First try to do the Question by yourself and wait till you give up But if it seems that you need a hint or the whole solution definitely you can go for that.

* If the approach is not clicking , Take the first Hint within 15 mins and then try again
* If it seems, you again get stuck ,Take another hint and then try again.
* If nothing seems to work , then go for the complete solution.

For NON-CS students,

You might not be getting the solution in the first go but it's okay to check the solution as you will learn the different approaches and would be able to apply those in the future Questions.

1. [Write a program in C to display n terms of natural number and their sum.](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-3.php)

Test Data : 7

*Expected Output* :

The first 7 natural number is :

1 2 3 4 5 6 7

The Sum of Natural Number upto 7 terms : 28

**[ADDON**] : Sum of odd numbers and also even numbers (Use bitwise AND(&) operator in checking even odd).

1. [Write a C program to calculate the factorial of a given number.](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-15.php)

Test Data :

Input the number : 5

*Expected Output* :

The Factorial of 5 is: 120

1. [Write a C program to check whether a given number is an armstrong number or not.](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-29.php)

Test Data :

Input a number: 153

*Expected Output* :

153 is an Armstrong number.

1. [Write a C program to determine whether a given number is prime or not.](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-32.php)

Test Data :

Input a number: 13

*Expected Output* :

13 is a prime number.

**[ADDON]** : [Write a program in C to find the prime numbers within a range of numbers](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-34.php)

1. [Write a program in C to display the number in reverse order](https://www.w3resource.com/c-programming-exercises/for-loop/c-for-loop-exercises-37.php)

Test Data :

Input a number: 12345

*Expected Output* :

The number in reverse order is : 54321

# [C program to find power of a number using for loop](https://codeforwin.org/2015/07/c-program-to-find-power-of-number-using-for-loop.html).

Test Data :

Input two numbers: 2 4

*Expected Output* :

2^4 : 16

# [Factorial](https://www.codechef.com/problems/FCTRL) (open question by clicking on it) **[Upskill yourself]**

# **(Different From 2nd Question)**

Note:

* Don’t get scared from the Question, just read it 3 to 4 times & try to analyse the hints given in the question.
* Hints are also there in the Input Output patterns
* It's not compulsory to submit the solution on the platform , just write the solution & upload it on Github.

To practice more on **FOR LOOPS** questions go to link below :

<https://www.w3resource.com/c-programming-exercises/for-loop/index.php>