

Lab Assignment 02

Marks

For each of the following problems write C++ program by using both memoization and tabulation methods

Problem - 1

→ [Fibonacci Number](#) 20

Problem - 2

→ [FARIDA](#) 20

Problem - 3

→ [Boredom](#) 20

Problem - 4

→ [N-th Tribonacci Number](#) 20

Problem - 5

- 20
- You are given an integer n. You can perform any of the following operations on it as many times you want -
- Subtract 1 from it
 - If it is divisible by 2 divide by 2
 - If it is divisible by 3 divide by 3

Find the minimum number of operations to make $n=1$

Constraints -

$1 \leq n \leq 10^5$

Output -

Print a single integer, the minimum number of operations to make $n=1$

Sample Input-	Sample Output-
7	3
11	4

Explanation-

When $n = 7$,

By using 3 operations we can go from 7 to 1.

>> 1st step -> subtract 1 from 7 then it became 6

>> 2nd step -> 6 is divisible by 3 hence we can divide it by 3 and it became 2

>> 3rd step -> 2 is divisible by 2 hence we can divide it by 2 and it became 1