

# Fibonacci Number

---

Problem Code	hw00b_fibo
Running Time Limit	1 sec
Memory Limit	16 mb

## Objective

- Be able to read keyboard input
- Be able to compute Fibonacci sequence.

## Introduction

Fibonacci number is a sequence of number shown as follow

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ...

The first two numbers are 0 and 1 and it is called the 0<sup>th</sup> Fibonacci number and the 1<sup>st</sup> Fibonacci number. The remaining number is calculated by adding the previous two numbers together. For example the 2<sup>nd</sup> Fibonacci number is  $1 = 0 + 1$ , the 3<sup>rd</sup> Fibonacci number is  $2 = 1 + 1$ , and the 4<sup>th</sup> Fibonacci number is  $3 = 2 + 1$ .

The Fibonacci number can be written as a recurrent relation  $F_i = F_{i-1} + F_{(i-2)}$ .

## Task

Your task is to read a number N from keyboard and then display the N<sup>th</sup> Fibonacci number on screen.

## Input

A single integer N ( $0 \leq N \leq 20$ ).

## Output

The N<sup>th</sup> Fibonacci number.

## Example

### Ex1

Input	Output
4	3

### Ex2

Input	Output
10	55