## ${\bf CS - CTfC} \\ {\bf Homework~1.1:~Fibonacci~numbers}$

This solution is limited because it calculates calls its already made. Though in terms of intuitive understanding I think the recursive approach is better because it directly implements the formula  $F_n = F_{n-1} + F_{n-2}$ 

## solution

```
//calculates any Nth fib number
 1
      function fib that takes int {\tt N}
 2
 3
           if N <= 1
 4
           return N
 5
           else
 6
           return with call fib(N - 1) + fib(N - 2)
 7
 8
      get input A
 9
10
      //prints all fib num from 0 to A
11
      for X times from O to A
12
           print output from call fib with {\tt X} as parameter
```