

## A. Vanya and Cubes

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Vanya got  $n$  cubes. He decided to build a pyramid from them. Vanya wants to build the pyramid as follows: the top level of the pyramid must consist of 1 cube, the second level must consist of  $1 + 2 = 3$  cubes, the third level must have  $1 + 2 + 3 = 6$  cubes, and so on. Thus, the  $i$ -th level of the pyramid must have  $1 + 2 + \dots + (i - 1) + i$  cubes.

Vanya wants to know what is the maximum height of the pyramid that he can make using the given cubes.

### Input

The first line contains integer  $n$  ( $1 \leq n \leq 10^4$ ) — the number of cubes given to Vanya.

### Output

Print the maximum possible height of the pyramid in the single line.

### Examples

input	Copy
1	
output	Copy
1	

  

input	Copy
25	
output	Copy
4	

### Note

Illustration to the second sample:

