





Bobby decided to learn to be a professional number writer. On the first day of his adventure, he wrote ones. After that two days he wrote twos. Then three days - threes. And so on.

Make a program that given a number X calculates what did Bobby write on the Xth day.

Input

Read X from the only line of the input file exercise.in

Output

In the output file <code>exercise.out</code> print the number that Bobby wrote on the Xth day.

Constraints

 $1 \le N \le 3\ 000\ 000$

Time limit: 0.1 seconds Memory limit: 256 MB

Examples

Input (exercise.in)	Output (exercise.out)	Notes
9	4	Day 1 -> 1
		Days 2 and 3 -> 2
11	5	Days 4, 5, 6 -> 3 Days 7, 8, 9, 10 -> 4 Days 11, 12, 13, 14, 15 -> 5