

Increasing Sequence Sum

Time limit: 1 sec

We define an *increasing sequence sum* of an integer **N** as a sequence $S = \langle a_1, a_2, \dots, a_k \rangle$ such that each element is an integer and $a_i \leq a_{i+1}$. There are several increasing sequence sums for each number **N**. Examples of possible increasing sequence sums of 5 are $\langle 1, 1, 1, 1, 1 \rangle$ and $\langle 1, 2, 2 \rangle$ and $\langle 5 \rangle$. Examples of sequences the summation of which is 5 that is not an increasing sequence sum are $\langle 1, 3, 1 \rangle$ and $\langle 4, 1 \rangle$ and $\langle 1, 1, 2, 1 \rangle$.

In this problem, you have to find the number of distinct increasing sequence sum of **N**.

Input

- The first line of input contains one integer **N** ($1 \leq N \leq 100$).

Output

The output contain exactly one line that gives the total number of distinct increasing sequence sum of **N**.

Example

Input	Output
10	42