Problem Q. Multiplication Table

Time limit   1000 ms
Mem limit   524288 kB

Find the middle element when the numbers in an $n \times n$ multiplication table are sorted in increasing order. It is assumed that n is odd.

For example, the 3×3 multiplication table is as follows:

$$
\begin{matrix}
1 & 2 & 3 \\
2 & 4 & 6 \\
3 & 6 & 9
\end{matrix}
$$

The numbers in increasing order are $[1, 2, 2, 3, 3, 4, 6, 6, 9]$, so the answer is 3.

Input

The only input line has an integer n.

Output

Print one integer: the answer to the task.

Constraints

- $1 \le n < 10^6$

Example

Input	Output
3	3