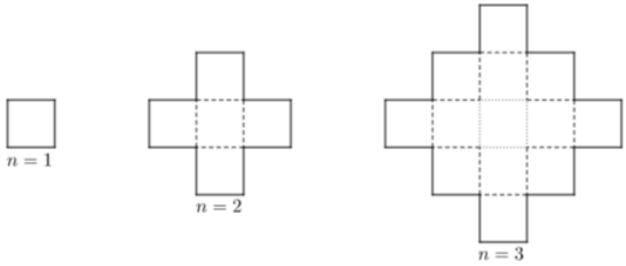
A. Alex and a Rhombus

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

While playing with geometric figures Alex has accidentally invented a concept of a n-*th order rhombus* in a cell grid.

A 1-*st order rhombus* is just a square 1×1 (i.e just a cell).

A n-*th order rhombus* for all $n \geq 2$ one obtains from a $n - 1$-*th order rhombus* adding all cells which have a common side with it to it (look at the picture to understand it better).



Alex asks you to compute the number of cells in a n-*th order rhombus*.

Input

The first and only input line contains integer n ($1 \leq n \leq 100$) — order of a rhombus whose numbers of cells should be computed.

Output

Print exactly one integer — the number of cells in a n-*th order rhombus*.

Examples

input	Copy
1	
output	**Copy**
1	

input	Copy
2	
output	**Copy**
5	

input	Copy
3	
output	**Copy**

```
13
```

Note

Images of rhombus corresponding to the examples are given in the statement.