

A. Hexagonal numbers

time limit per test: 2 seconds

memory limit per test: 64 megabytes

input: standard input

output: standard output

Hexagonal numbers are figurate numbers which can be calculated using the formula $h_n = 2n^2 - n$. You are given n ; calculate n -th hexagonal number.

Input

The only line of input contains an integer n ($1 \leq n \leq 100$).

Output

Output the n -th hexagonal number.

Examples

input
2
output
6

input
5
output
45