

A. Crystal Ball Sequence

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Crystal ball sequence on hexagonal lattice is defined as follows: n -th element is the number of lattice points inside a hexagon with $(n + 1)$ points on each side. The formula is $H_n = 3 \cdot n \cdot (n + 1) + 1$. You are given n ; calculate n -th element of the sequence.

Input

The only line of input contains an integer n ($0 \leq n \leq 9$).

Output

Output the n -th element of crystal ball sequence.

Examples

input
1
output
7

input
3
output
37