A. Crystal Ball Sequence

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
```