A. Lazy Caterer Sequence

time limit per test: 2 seconds memory limit per test: 64 megabytes input: standard input output: standard output

Lazy caterer sequence is defined as the maximum number of pieces formed when slicing a convex pancake with n cuts (each cut is a straight line). The formula is $C_n = n \cdot (n+1) / 2 + 1$. You are given п; calculate *n*-th element of the sequence.

Input

The only line of the input contains an integer n ($0 \le n \le 100$).

Output

Output the n-th element of lazy caterer sequence.

Examples	
input	
2	
output	
4	
input	
5	
output	
16	