

Problem E

Monkey and the Peaches

Time limit: 3 seconds

Memory limit: 1024 megabytes

Problem Description

A monkey picked N peaches. On the first day, it ate half of the peaches plus one more. The next morning, it ate half of the remaining peaches plus one more. Every morning thereafter, it continued eating half of the remaining peaches plus one more.

On the morning of the M -th day, when the monkey wanted to eat again, it found that only one peach was left.

Given the number of days M , how many peaches did the monkey originally pick?

Input Format

The input contains several test cases. Each test case consists of a single integer M , which represents the number of days the monkey ate peaches.

Output Format

A single integer N , representing the initial number of peaches the monkey picked.

Technical Specification

- $1 \leq M \leq 30$

Sample Input 1

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2
5
10
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Sample Output 1

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4
46
1534
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