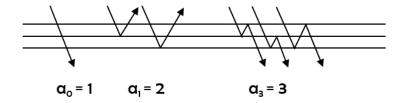
Ray Through Glasses(Edited)

Extracted from:UVA 10334 Source file name: glasses.py Time limit: 1 second

La solución de este problema debe ser RECURSIVO.

Suppose we put two panes of glass back-to-back. How many ways a_n are there for light rays to pass through or be reflected after changing direction n times?

The following figure shows the situations when the value of n is 0, 1 and 2:



Input

It is a set of lines with an integer *n* where $0 \le n \le 30$ in each of them.

The input must be read from standard input.

Output

For every one of these integers a line containing a_n as described above.

The output must be written to standard output.

Sample Input	Sample Output
0	1
Cample Input	0 1011
Sample Input	Sample Output
1	2