

CODEFORCES

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A. Filling Shapes

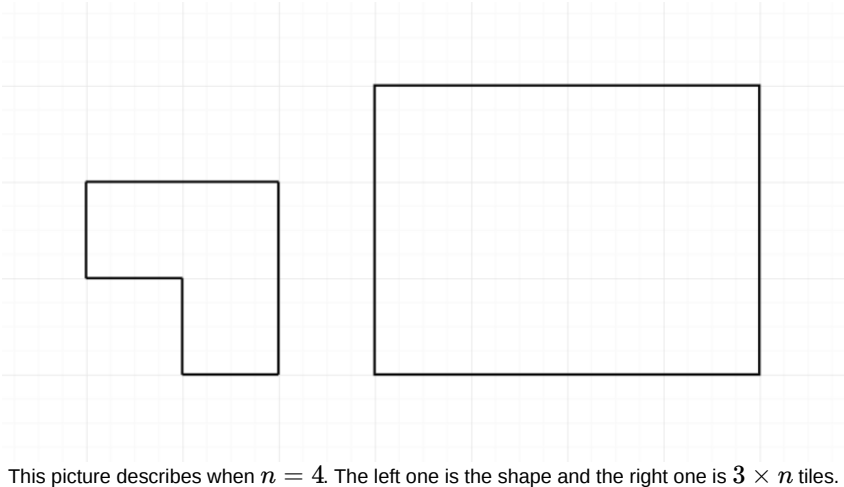
time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

You have a given integer  $n$ . Find the number of ways to fill all  $3 \times n$  tiles with the shape described in the picture below. Upon filling, no empty spaces are allowed. Shapes cannot overlap.



This picture describes when  $n = 4$ . The left one is the shape and the right one is  $3 \times n$  tiles.

**Input**  
The only line contains one integer  $n$  ( $1 \leq n \leq 60$ ) — the length.

**Output**  
Print the number of ways to fill.

Examples

input	Copy
4	
output	Copy
4	

input	Copy
1	
output	Copy
0	

**Note**  
In the first example, there are 4 possible cases of filling.  
  
In the second example, you cannot fill the shapes in  $3 \times 1$  tiles.

Codeforces Round #566 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest

→ Problem tags

dp   math   \*1000

No tag edit access

→ Contest materials

Announcement (en)

Tutorial (en)

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