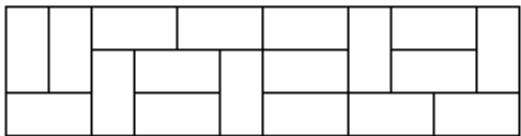


## Problem D: Tri Tiling

In how many ways can you tile a  $3 \times n$  rectangle with  $2 \times 1$  dominoes?

Here is a sample tiling of a  $3 \times 12$  rectangle.



Input consists of several test cases followed by a line containing -1. Each test case is a line containing an integer  $0 \leq n \leq 30$ . For each test case, output one integer number giving the number of possible tilings.

### Sample input

```
2
8
12
-1
```

### Output for Sample Input

```
3
153
2131
```

---

Piotr Rudnicki