

Problem D: Tri Tiling

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

Here is a sample tiling of a 3×12 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
```

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