problem **5**

Tribonacci Numbers

3 points

hp codewars

2013

Introduction

You may recall that Fibonacci numbers are formed by a sequence starting with 0 and 1 where each succeeding number is the sum of the two preceding numbers; that is, F[n] = F[n-1] + F[n-2] with F[0] = 0 and F[1] = 1.

Tribonacci numbers are like Fibonacci numbers except that the starting sequence is 0, 1 and 1 and each succeeding number is the sum of the three preceding numbers; that is, T[n] = T[n-1] + T[n-2] + T[n-3] with T[0] = 0, T[1] = 1 and T[2] = 1.

The first eleven terms of the Tribonacci sequence are 0, 1, 1, 2, 4, 7, 13, 24, 44, 81 and 149.

Input

Each line of input is an integer. The maximum possible input value is 30. The last line of input is a -1.

```
3
9
11
0
-1
```

Output

For each non-negative input, the program must use the integer as an index to the Tribonacci sequence and print the Tribonacci number corresponding to that index.

```
2
81
274
0
```