

Once upon a time, there is a special coco-cola store. If you return three empty bottles to the shop, you'll get a full bottle of coco-cola to drink. If you have n empty bottles right in your hand, how many full bottles of coco-cola can you drink?

Input

There will be at most 10 test cases, each containing a single line with an integer n ($1 \leq n \leq 100$). The input terminates with $n = 0$, which should not be processed.

Output

For each test case, print the number of full bottles of coco-cola that you can drink.

Spoiler

Let me tell you how to drink 5 full bottles with 10 empty bottles: get 3 full bottles with 9 empty bottles, drink them to get 3 empty bottles, and again get a full bottle from them. Now you have 2 empty bottles. *Borrow another empty bottle from the shop*, then get another full bottle. Drink it, and finally return this empty bottle to the shop!

Sample Input

```
3
10
81
0
```

Sample Output

```
1
5
40
```