

## 4736 Probability One

Number guessing is a popular game between elementary-school kids. Teachers encourage pupils to play the game as it enhances their arithmetic skills, logical thinking, and following-up simple procedures. We think that, most probably, you too will master in few minutes. Here's one example of how you too can play this game: Ask a friend to think of a number, let's call it  $n_0$ .

Then:

1. Ask your friend to compute  $n_1 = 3 * n_0$  and to tell you if  $n_1$  is even or odd.
2. If  $n_1$  is even, ask your friend to compute  $n_2 = n_1/2$ . If, otherwise,  $n_1$  was odd then let your friend compute  $n_2 = (n_1 + 1)/2$ .
3. Now ask your friend to calculate  $n_3 = 3 * n_2$ .
4. Ask your friend to tell you the result of  $n_4 = n_3/9$ . ( $n_4$  is the quotient of the division operation. In computer lingo, '/' is the integer-division operator.)
5. Now you can simply reveal the original number by calculating  $n_0 = 2 * n_4$  if  $n_1$  was even, or  $n_0 = 2 * n_4 + 1$  otherwise.

Here's an example that you can follow: If  $n_0 = 37$ , then  $n_1 = 111$  which is odd. Now we can calculate  $n_2 = 56$ ,  $n_3 = 168$ , and  $n_4 = 18$ , which is what your friend will tell you. Doing the calculation  $2 * n_4 + 1 = 37$  reveals  $n_0$ .

### Input

Your program will be tested on one or more test cases. Each test case is made of a single positive number ( $0 < n_0 < 1,000,000$ ).

The last line of the input file has a single zero (which is not part of the test cases.)

### Output

For each test case, print the following line:

$k.$   $B$   $Q$

Where  $k$  is the test case number (starting at one,)  $B$  is either 'even' or 'odd' (without the quotes) depending on your friend's answer in step 1.  $Q$  is your friend's answer to step 4.

### Sample Input

```
37
38
0
```

### Sample Output

```
1. odd 18
2. even 19
```