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 n0 . Then:

1. Ask your friend to compute n1 = 3 ∗ n0 and to tell you if n1 is even or odd.
2. If n1 is even, ask your friend to compute n2 = n1 /2. If, otherwise, n1 was odd then let your friend compute n2 = (n1 + 1)/2.
3. Now ask your friend to calculate n3 = 3 ∗ n2 .
4. Ask your friend to tell tell you the result of n4 = n3 /9. (n4 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 n0 = 2 ∗ n4 if n1 was even, or n0 = 2 ∗ n4 + 1 otherwise.

Here's an example that you can follow: If n0 = 37, then n1 = 111 which is odd. Now we can calculate n2 = 56, n3 = 168, and n4 = 18, which is what your friend will tell you. Doing the calculation 2 × n4 + 1 = 37 reveals n0 .

Input

Your program will be tested on one or more test cases. Each test case is made of a single positive number (0 < n0 < 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.

Example

Input:
37
38
0

Output:
1. odd 18
2. even 19