3n+1

Time limit: 1.0s   **Memory limit:** 16M

Pick a positive integer n. If it is odd, multiply it by three and then add one. Otherwise (if it is even), divide it by two. The positive integer obtained is the new n, and this procedure is repeated.

It is believed that n will eventually become 1 (this is called the *Collatz conjecture*.) Computers have checked that any value of n less than 10^{20} does, indeed, eventually become 1 if this procedure is applied enough times.

You will be given the value of n. Determine how many times this procedure must be applied before n becomes 1.

Input Specification

The initial value of n.

Output Specification

The number of operations we have to perform on n before it becomes 1.

Constraints

Any value of n, initial or intermediate, will be less than 2^{31}.

Sample Input

```
7
```

Sample Output

```
16
```

Explanation

n will go through these steps:

$$7, 22, 11, 34, 17, 52, 26, 13, 40, 20, 10, 5, 16, 8, 4, 2, 1$$