G • Simple Collatz Sequence

The *Simple Collatz Sequence* (SCS) starting at an integer ***n***, is defined by the formula:

```
S(k) = (k/2 if k is even, else (k+1))
```

The sequence is then ***n***, `S(`***n***`)`, `S(S(`***n***`))`, … until the value first reaches 1.

For example, starting at 11, we have:

11 -> 12 -> 6 -> 3 -> 4 -> 2 ->1

The sequence always ends at `1`. (Fun Fact: The *Hard Collatz Sequence* sends odd `k` to `3*k+1`. It is unknown whether that sequence always ends at `1`.)

Let `A(`***n***`)` = *number of steps in the SCS starting at* ***n***. For example, `A(11) = 6`. Write a program which computes `A(`***n***`)` for a given input ***n***.

Input

Input consists of a single line which contains a positive decimal integer, ***n***, which starts the sequence. ***n*** will fit in a 32-bit unsigned integer.

Output

The output consists of a single line that contains the value of `A(n)`, *the number of steps in the SCS starting at* ***n***.

Sample 1:

Sample Input	Sample Output
11	6

Sample 2:

Sample Input	Sample Output
123456789	39