

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

D. Break Number

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Let's define $f(x)$ is the number of times that number x is divisible by 2 where x is an integer number.

For example $f(18)$ is equal to 1, because if we divide 18 by 2 it will become 9 so we cannot divide 9 by 2 again because 9 is not divisible by 2.

Another example is $f(24)$ is equal to 3, because if we divide 24 by 2 it will become 12, again we can divide 12 by 2 (because 12 is divisible by 2) so it will become 6, again we can divide 6 by 2 (because 6 is divisible by 2) so it will become 3 then we cannot divide 3 by 2 (because 3 is not divisible by 2), so we could divide 24 three times.

The last example is $f(7)$ is equal to 0 because we can't divide 7 by 2.

In this you will have N numbers and you should print the maximum $f(x)$ for all these numbers.

Input

The first line will contain one integer N where $(1 \leq N \leq 10^5)$.

The second line will contain N integer numbers separated by spaces where each number will be between 1 and 10^{18} (inclusive).

Output

Print the maximum $f(x)$ for all numbers in the input.

Examples

input	Copy
3 18 24 7	
output	Copy
3	

input	Copy
4 14 7 9 5	
output	Copy
1	

ICPC Assiut Advanced Newcomers 2023

Private

Participant

→ Group Contests

ICPC Assiut Advanced Newcomers 2023 Contest 5

ICPC Assiut Advanced Newcomers 2023 Contest 4

ICPC Assiut Advanced Newcomers 2023 Contest 3

ICPC Assiut Advanced Newcomers Practice #1

ICPC Assiut Advanced Newcomers 2023 Contest 2

ICPC Assiut Advanced Newcomers 2023 Onsite Contest 2

ICPC Assiut Advanced Newcomers 2023 Contest 1

ICPC Assiut Advanced Newcomers 2023 Onsite Contest 1

ICPC Assiut Advanced Newcomers 2023 Contest 3

Finished

Practice

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Submit?

Language: GNU G++20 11.2.0 (64 bit, w

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
227210989	Oct/08/2023 17:40	Accepted