

RATING EDU API CALENDAR HELP ICPC CHALLENGE HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS

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 $(1 \le N \le 10^5)$.

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	Сору
3	
18 24 7	
output	Сору
3	
input	Сору
4	
14 7 9 5	
output	Сору
1	

ICPC Assiut Advanced Newcomers <u> 2023</u> **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

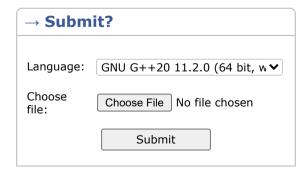
Practice



→ 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



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