ICPC Assiut University Community

Newcomers Training , Do Your Best



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

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

F. 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) as the number of times at which the integer x can be divided by 2.

You are given N numbers, and you should print the maximum f(x) among all these numbers.

Input

The first line contains one number N ($1 \le N \le 10^5$).

The second line contains N space-separated numbers where each number is between 1 and 10^{18} (inclusive).

Output

Print the maximum f(x) among all numbers.

Examples

input	Сору
3 18 24 7	
output	Сору
3	



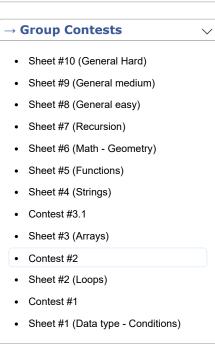
Note

In the first test case:

- 1. f(18) is equal to 1; because we can divide 18 by 2 resulting in 9, but we cannot divide 9 by 2 (9 is not divisible by 2).
- 2. f(24) is equal to 3; because we can divide 24 by 2 resulting in 12; again we can divide 12 by 2 (12 is divisible by 2) resulting in 6; again we can divide 6 by 2 (6 is divisible by 2) resulting in 3, but we cannot divide 3 by 2 (3 is not divisible by 2); so we could divide 24 three times.
- 3. f(7) is equal to 0; because we cannot divide 7 by 2.

Assiut University Training Newcomers Public Participant





Finished