## Problem C: Magical GCD

The Magical $G C D$ of a nonempty sequence of positive integers is defined as the product of its length and the greatest common divisor of all its elements.

Given a sequence $\left(a_{1}, \ldots, a_{n}\right)$, find the largest possible Magical GCD of its connected subsequence.

## Input

The first line of input contains the number of test cases $T$. The descriptions of the test cases follow:

The description of each test case starts with a line containing a single integer $n, 1 \leqslant n \leqslant$ 100000 . The next line contains the sequence $a_{1}, a_{2}, \ldots, a_{n}, 1 \leqslant a_{i} \leqslant 10^{12}$.

## Output

For each test case output one line containing a single integer: the largest Magical GCD of a connected subsequence of the input sequence.

## Example

| For an example input | the correct answer is: |
| :--- | :--- |
|  |  |
| 1 |  |
| 5 |  |
| 30602020 | 80 |

