G: Taste in art

Memory Limit : **256 MB**

Maggie has a large collection of modern paintings. She is particularly proud of those depicting colourful squares – each painting having a different number of squares. She intends to finally make an exhibition of the paintings for her friends, but their sublime tastes require special handling. Maggie knows that if among the presented paintings there are three depicting $k, 2k$ and $3k$ squares, for some k, then the whole exhibition will be perceived as *predictable*, thus dull, thus a failure. If no such a k exists, the event will be a great success. On the other hand, Maggie wants to show (off) as many paintings as possible. She spends hours on trying to choose the largest possible number of paintings, yet avoiding a predictability. Help her in this task.

Input

The first line of the input contains a single natural number n ($1 \leqslant n \leqslant 50\,000$), denoting the number of paintings with squares in Maggie's collection. In the second and last line of the input there is a sequence of n pairwise distinct natural numbers a_i ($1 \leqslant a_i \leqslant 10^9$), each separated by a single space, denoting the number of squares on each of paintings in order.

Output

You should write a single integer number in the first and only line of the output – the largest possible number of Maggie's paintings with squares that can form a non-predictable exhibition.

Example

Input	Output
3 6 9 3	2

The three paintings form a predictable exhibition, but any two of them do not.

Input	Output
6 1 2 3 4 5 6	5

The largest set of paintings that form an unpredictable exhibition includes all paintings except the second one.