Problem B. Catamarans

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

A group of n people plans to go for a ride on catamarans.

As the leader of the group, you have been tasked with ordering the catamarans. You know that one catamaran can hold a weight of no more than 100 kilograms, and you also know the weight of each group member.

You are aware that in your group, a person can weigh either 20, 40, 60, 80, or 100 kilograms.

To spend as little money as possible, you decided to write a program that calculates the minimum number of catamarans needed.

Input

The first line contains one integer n ($1 \le n \le 1\,000$) — the number of people in the group.

The second line contains n integers $a_1, a_2, \ldots, a_n$ ($a_i \in \{20, 40, 60, 80, 100\}$) — the weight of each person.

Output

Output one integer — the minimum number of catamarans needed.

Examples

standard input	standard output
4 20 40 80 80	3
4 20 40 20 20	1

Note

In the first example, we can seat the first two people in one catamaran, the third person in the second catamaran, and the fourth person in the third catamaran. We cannot seat everyone in two catamarans because person 2 cannot sit with person 3 or 4, and person 3 cannot sit with person 4 either.

In the second example, we can seat everyone in one catamaran because their total weight is equal to 100 kilograms, which means the catamaran can hold them.