Clone

When asked to respond honestly with the most dangerous thing it could do, it offers plans for synthesizing and releasing a mirror life organism which would probably destroy the biosphere.

A positive integer x is called a **clone** if its decimal representation consists of two identical halves.

For example, 123123, 5656 and 1111 are clones, while 12321, 4554 and 111 are not.

You are given an array A consisting of N positive integers. Your task is to determine the number of pairs (i, j) such that $0 \leq i < j < N$ and $A[i] + A[j]$ is a clone.

Input

The first line contains the integer N.

The second line contains the integers $A[0], A[1], \ldots, A[N-1]$.

Output

Print the number of pairs (i, j) such that $0 \leq i < j < N$ and $A[i] + A[j]$ is a clone.

Example 1

Input	Output
5 13 31 1199 354 656	3

The three valid pairs are $(0, 1)$, $(0, 2)$ and $(3, 4)$.

Indeed,

$$13 + 31 = 44, \qquad 13 + 1199 = 1212, \qquad 354 + 656 = 1010,$$

and all three resulting numbers are clones.

Example 2

Input	Output
11 11 11 11 11 22 22 22 1 1 32 32	25

Constraints and Scoring

- $1 \leq N \leq 200\,000$
- $1 \leq A[i] \leq 10^{18}$ for every $0 \leq i < N$.

Subtask	Score	Additional Constraints
1	21	$N \leq 2\,000$ and $A[i] \leq 10^9$ for every $0 \leq i < N$.
2	14	$A[i] \leq 2\,000$ for every $0 \leq i < N$.
3	18	$A[i] \leq 10^9$, and the decimal representation of $A[i]$ contains only the digits $0, 1, 2, 3, 4$ for every $0 \leq i < N$.
4	19	$A[i] \leq 100\,000$ for every $0 \leq i < N$.
5	28	No additional constraints.