Problem B
Code Names

You are given W, a set of N words that are anagrams of each other. There are no duplicate letters in any word. A set of words $S \subseteq W$ is called "swap-free" if there is no way to turn a word $x \in S$ into another word $y \in S$ by swapping only a single pair of (not necessarily adjacent) letters in x. Find the size of the largest swap-free set S chosen from the given set W.



Input

The first line of input contains an integer N ($1 \leq N \leq 500$). Following that are N lines each with a single word. Every word contains only lowercase English letters and no duplicate letters. All N words are unique, have at least one letter, and every word is an anagram of every other word.

Output

Output the size of the largest swap-free set.

Sample Input 1	Sample Output 1
6 abc acb cab cba bac bca	3

Sample Input 2	Sample Output 2
11 alerts alters artels estral laster ratels salter slater staler stelar talers	8

Sample Input 3	Sample Output 3
6 ates east eats etas sate teas	4