Time limit: 1.0s Memory limit: 32M

Mirko has been moving up in the world of basketball, starting as a mere spectator, mastering snack salesmanship, finally reach the coveted position of the national team coach. He is now facing a difficult task: selecting the five primary players for the upcoming match against Tajikistan.

Since Mirko is incredibly lazy, he doesn't bother remembering players' names, let alone their actual skills. That's why he has settled on selecting five players who share the same first letter of their surnames, so that he can remember them more easily. If there are no five players sharing the first letter of their surnames, Mirko will simply forfeit the game!

In order to obtain insight into possibilities for his team, Mirko wants to know all the different letters that his primary team's surnames may begin with.

Input

The first line of input contains the positive integer N ($1 \le N \le 150$), the number of players that Mirko has available.

Each of the following N lines contains one word (at most 30 characters long, consisting only of lowercase English letters), a surname of one of the players.

Output

If there are no five players that Mirko can select matching his criteria, output a single line containing the word <a>PREDAJA). Otherwise, output all possible first letters of representation player surnames, sorted lexicographically, in a single line with no spaces.

Sample Input 1

18 babic keksic boric bukic sarmic balic kruzic hrenovkic beslic boksic krafnic pecivic klavirkovic kukumaric sunkic kolacic kovacic prijestolonasljednikovic

Sample Output 1

bk

Explanation

Mirko can choose between teams with all players' surnames beginning with either k or b.

Sample Input 2

6			
michael			
jordan lebron			
lebron			
james			
james kobe			
bryant			

Sample Output 2

PREDAJA