

Weekly Puzzle #1

Our coding comp. team has decided that the leader should be the person with the name containing the greatest number of different alphabet letters (using the uppercase English alphabet from A through Z.) For example, the name `ARTUR` has four different alphabet letters: A, R, T, and U. The name `PATRICK` has seven different letters. If the team only consisted of these 2 people, `PATRICK` would be the group leader.

If there is a tie, the person whose name comes earliest in alphabetical order is the leader.

Can you determine who the leader should be with a given list of names of the people in the team?

Input

The first line of the input gives the number of test cases, **T**. **T** test cases follow. Each test case starts with a line with an integer **N**, the number of people in the team. Then **N** lines follow. The i-th line represents the name of the i-th person (i.e the first line after the line denoting the number of people is 1st). Each name contains at most 20 characters and contains at least one alphabet letter.

Output

For each test case, output one line containing `Case x: y`, where *x* is the test case number (starting from 1) and *y* is the name of the leader.

Limits

$1 \leq T \leq 100$.

$1 \leq N \leq 100$.

Test set 1 – Small data set

Each name consists of at most 20 characters and only consists of the uppercase English letters `A` through `Z`.

Test set 2 – Large data set

Each name consists of at most 20 characters and only consists of the uppercase English letters `A` through `Z` and `'` (space).

All names start and end with alphabet letters.

Sample

Input

```
2
3          //case 1
ADAM
FELIX
AGRAWAL
3          //case 2
GORDON
ADAM
PUM BA
```

Output

```
Case 1: AGRAWAL
Case 2: GORDON
```

In sample case #1, AGRAWAL contains 5 different alphabet letters('A', 'G', 'R', 'W', 'L'), tied with FELIX but his name comes earliest in alphabetical order, so he is the leader.

Sample case #2 would only appear in Large data set. The name PUM BA contains 5 different alphabet letters, the name GORDON also contains 5 different alphabet letters. GORDON has more different alphabet letters so he is the leader.

Test cases are on the next page.

Test set	Input	Output
Test set 1	2 12 Maxwell Fletcher Harvey Gabriel Austin George Hamish Kai Jordan Archer Theodore Patrick 6 Edward Muhammad Luca Carter Nate Archie	Case 1: Fletcher Case 2: Archie
Test set 2	5 8 Alex Angus Hunter Jett Oscar Patrick Andrew Sebastian 9 Toby Christian Corey Elijah Christopher Dominic Declan Adam Mason 12 Callum Finn Henry Aidan Aiden Jai Ashton	Case 1: Andrew Case 2: Christopher Case 3: Ashton Case 4: Charles Case 5: Brandon

	Flynn Zac Joel Levi Zane 13 Brock Lincoln Brodie Kyle Beau Darcy Hamish David Tom Charles John Sean Taj 3 Tyson Brandon Tristan	
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