**IEEE Xtreme Practice**

September 17th, 2019

00:

Check if String is a palindrome

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<https://code.google.com/codejam/contest/6304486/dashboard>

Problem

The Constitution of a certain country states that the leader is the person with the name containing the greatest number of different alphabet letters. (The country uses the uppercase English alphabet from A through Z.) For example, the name GOOGLE has four different alphabet letters: E, G, L, and O. The name APAC CODE JAM has eight different letters. If the country only consists of these 2 persons, APAC CODE JAM would be the leader.  
  
If there is a tie, the person whose name comes earliest in alphabetical order is the leader.  
  
Given a list of names of the citizens of the country, can you determine who the leader is?

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 interger **N**, the number of people in the country. Then **N** lines follow. The i-th line represents the name of the i-th person. 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 ≤ **T** ≤ 100.  
1 ≤ **N** ≤ 100.

Small dataset

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

Large dataset

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 | Output |
| 2  3  ADAM  BOB  JOHNSON  2  A AB C  DEF | Case #1: JOHNSON  Case #2: A AB C |

In sample case #1, JOHNSON contains 5 different alphabet letters('H', 'J', 'N', 'O', 'S'), so he is the leader.  
  
Sample case #2 would only appear in Large data set. The name DEF contains 3 different alphabet letters, the name A AB C also contains 3 different alphabet letters. A AB C comes alphabetically earlier so he is the leader.

02:

<https://csacademy.com/ieeextreme-practice/task/96c8b1313edd72abf600facb0a14dbab/>



