Dictionary

Your task is to make a simple dictionary.

You will be given a paragraph. It is guaranteed that no punctuation symbol will be given in the input except dot "." and there will be only one space between words.

Input :

The first line of input is a integer T representing the number of test cases (T≤10). Each test case begins with a number N represents the number of lines of the paragraph in that test case. (1≤N≤10).

Then N lines there is a text S. (1≤|S|≤10000).

Output:

Output each word found in the paragraph only once in a lexicographical order. There will be a blank line between two cases. See the sample input output for clarity.

Sample:

Input	Output
2 3 dhaka city college. dhanmondi dhaka. bangladesh. 2 argentina argentina argentina. argentinaaaaaaaaa brazil.	Case #1: bangladesh city college dhaka dhanmondi Case #2: argentina argentinaaaaaaaaa brazil