Problem D: Four Letter Words

Input File: four.in

Given a list of four-letter words, alphabetize them based on their second and fourth letters, rather than all four letters. With normal alphabetical ordering, the following words would be sorted this way:

chin

door

dove

time

wind

But with our new alphabetization, they would be ordered like this:

chin

wind

time

dove

door

Input:

Input will start with a positive integer representing the number of words to be sorted. Following this number are the words themselves, one per line. Each word will contain only lowercase letters. There will be no more than 100 words.

Output:

List the words from the input file, sorted accordingly. If there is a "tie", the word that occurred first in the input file should be listed first.

Input:

6

chin

dour

door

dove

time

wind

Output:

chin

wind

time dove

dour

door

