In an oxford dictionary, all the words are ordered by lexicographic ordering of English alphabet:

Thats how we know that we see "Banana" before "Bat" when we flip thru the dictionary.

Lets say we stumble upon a vulcan dictionary. How do you construct the lexicographic ordering of vulcan alphabet?

Pretend that all the alphabets below are vulcan alphabets.

Input is a text file that contains words in this vulcan dictionary. Each line is a word.

ABM

ABQ

ACN

ACP

BC

BM

BN

CAP

CAQ

Program should output this order:

ABCMNPQ

This code should be scalable to run on a big dictionary with a million of words and alphabet size of a few thousand alphabets.

Feel free to write this in java or c++. Send instructions on compiling and running the code.