Consonants and vowels
Concurso On-line 6 (OIE08) (2008)

Your task is to write a program that reads \(n\) consonants and \(n\) vowels, and that prints all the words that can be formed using exactly once each one of the given letters. The words have to start in consonant, and must alternate consonants and vowels.

Input
The input consists of a natural \(n\) between 1 and 5, followed by \(n\) different consonants and \(n\) different vowels. The consonants as well as the vowels are given in alphabetical order.

Output
Your program must print all the words that can be formed with the \(2n\) given letters, starting in consonant and alternating consonants and vowels. The words must be written in alphabetical order, one per line. Logically, it is not necessary that the generated words have any meaning.

Sample input 1
3
mpt
aeo

Sample output 1
mapeto
mapote
matepo
matope
mepato
mepota
metapo
metapa
mopeta
motape
motepa
pameto
pamote
patemo
patome
pemato
pemota
petamo
petoma
pomate
pometa
potame
potama
tamepo
tamope
tapemo
tapome
temapo
temopa
tepamo
tepoma
tomape
tomepa
topame
topema
Sample input 2
2
cs
ao

Sample output 2
caso
cosa
saco
soca

Sample input 3
1
b
u

Sample output 3
bu

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