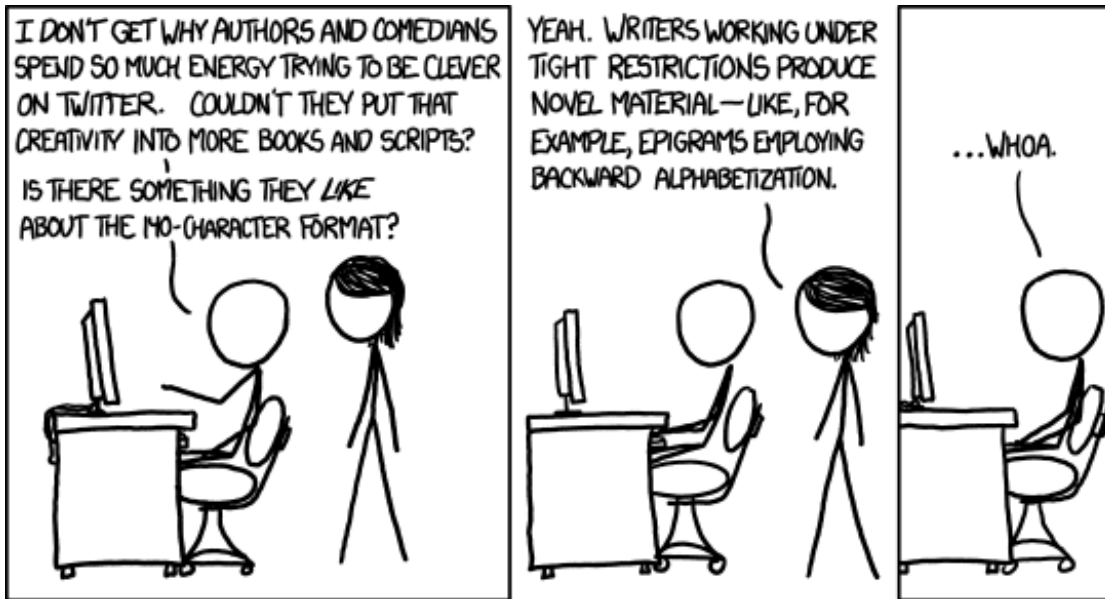


Backwards alphabetized epigrams



Whoa...

Description

Given text, determine whether or not the words are arranged in reverse alphabetical order.

Input

The first line is the number of words. The next line has the words, and consists only of ASCII lowercase letters and single spaces. The total length is at most 1000 characters.

Input

16

yeah writers working under tight restrictions produce novel material like for example epigrams employing backward alphabetization

Output

yes

Input

4

correct horse battery staple

Output

no

Input

25

na na na na na na na na na na na na na na na na na na na na na na batman

Output

yes