Grid Challenge | HackerRank

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Grid Challenge ★

Submissions

Given a square grid of characters in the range ascii[a-z], rearrange elements of each row alphabetically,
ascending. Determine if the columns are also in ascending alphabetical order, top to bottom. Return YES if
they are or NO if they are not.

Leaderboard

Example

$$grid = ['abc', 'ade', 'efg']$$

Problem

The grid is illustrated below.

a b c

a d e

e f g

The rows are already in alphabetical order. The columns a a e, b d f and c e g are also in alphabetical order, so the answer would be YES. Only elements within the same row can be rearranged. They cannot be moved to a different row.

Function Description

Complete the gridChallenge function in the editor below.

gridChallenge has the following parameter(s):

• string grid[n]: an array of strings

Returns

Author	Gary97
Difficulty	Easy
Max Score	100
Submitted By	10894
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• string: either YES or NO

Input Format

The first line contains t, the number of testcases.

Each of the next t sets of lines are described as follows:

- The first line contains n, the number of rows and columns in the grid.
- The next n lines contains a string of length n

Constraints

$$1 \le t \le 100$$

$$1 \le n \le 100$$

Each string consists of lowercase letters in the range ascii[a-z]

Output Format

For each test case, on a separate line print YES if it is possible to rearrange the grid alphabetically ascending in both its rows and columns, or NO otherwise.

Sample Input

STDIN	Function
1	t = 1
5	n = 5
ebacd	<pre>grid = ['ebacd', 'fghij', 'olmkn', 'trpqs', 'xywuv']</pre>
fghij	
olmkn	
trpqs	
xywuv	

Sample Output

English







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```
Explanation

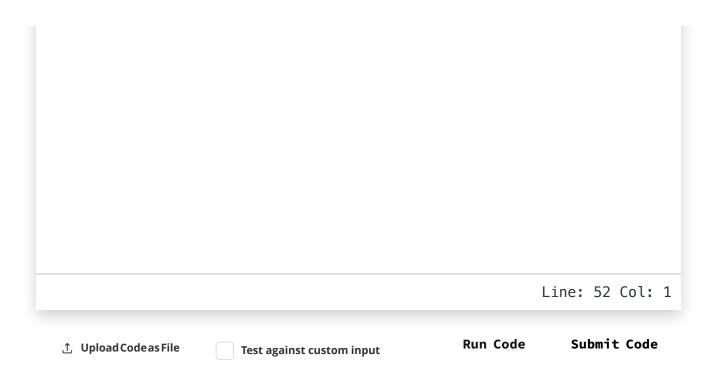
The 5x5 grid in the 1 test case can be reordered to

abcde
fghij
klmno
pqrst
uvwxy

This fulfills the condition since the rows 1, 2, ..., 5 and the columns 1, 2, ..., 5 are all alphabetically sorted.
```

```
Change Theme
                         Language Python 3
                                                             100
                                                                     K Z
     #!/bin/python3
 1
 2
     import math
 3
     import os
 4
     import random
 5
     import re
 6
     import sys
 7
 8
 9
     # Complete the 'gridChallenge' function below.
10
11
     # The function is expected to return a STRING.
12
     # The function accepts STRING_ARRAY grid as parameter.
13
     #
14
15
     dof aridChallonga/arid).
```

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