

Grid Challenge

★

Problem	Submissions	Leaderboard	Discussions	Editorial
---------	-------------	-------------	-------------	-----------

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.

Example
`grid = ['abc','ade','efg']`

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

- 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

$1 \leq t \leq 100$
 $1 \leq n \leq 100$

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	grid = ['ebacd', 'fghij', 'olmkn', 'trpqs', 'xywuv']
fghij	
olmkn	
trpqs	
xywuv	

Sample Output

YES

Author	Gary97
Difficulty	Easy
Max Score	100
Submitted By	4299

NEED HELP?

- [View discussions](#)
- [View editorial](#)
- [View top submissions](#)

RATE THIS CHALLENGE



MORE DETAILS

- [Download problem statement](#)
- [Download sample test cases](#)
- [Suggest Edits](#)

CHOOSE A TRANSLATION

English

▼



Explanation

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

```
abcde
fghij
klmno
pqrst
vwvxy
```

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

Change Theme Language C#

```
1 using System.CodeDom.Compiler;
2 using System.Collections.Generic;
3 using System.Collections;
4 using System.ComponentModel;
5 using System.Diagnostics.CodeAnalysis;
6 using System.Globalization;
7 using System.IO;
8 using System.Linq;
9 using System.Reflection;
10 using System.Runtime.Serialization;
11 using System.Text.RegularExpressions;
12 using System.Text;
13 using System;
14
15 class Result
16 {
17
18     /*
19      * Complete the 'gridChallenge' function below.
20      *
21      * The function is expected to return a STRING.
22      * The function accepts STRING_ARRAY grid as parameter.
23      */
24
25     public static string gridChallenge(List<string> grid)
26     {
27
28     }
```

Line: 61 Col: 1

Upload Code as File

☐ Test against custom input

Run Code

Submit Code