



HackerRank

Prepare

Certify

Compete



1

[Prepare](#) > [Interview Preparation Kits](#) > [1 Month Preparation Kit](#) > [Week 2](#) > [Grid Challenge](#)

## 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

Author [Gary97](#)Difficulty [Easy](#)

Max Score 100

Submitted By [10894](#)

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

- 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	<code>t = 1</code>
5	<code>n = 5</code>
ebacd	<code>grid = ['ebacd', 'fghij', 'olmkn', 'trpqs', 'xywuv']</code>
fghij	
olmkn	
trpqs	
xywuv	

### Sample Output

English



YES

### Explanation

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

```
abcde
fghij
klmno
pqrst
vwxy
```

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



```
1  #!/bin/python3
2
3  import math
4  import os
5  import random
6  import re
7  import sys
8
9  #
10 # Complete the 'gridChallenge' function below.
11 #
12 # The function is expected to return a STRING.
13 # The function accepts STRING_ARRAY grid as parameter.
14 #
15
16 def gridChallenge(grid):
```

Line: 52 Col: 1

 Upload Code as File

☐

Test against custom input

**Run Code**

**Submit Code**

[Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#)