

Problem 953: Verifying an Alien Dictionary

Problem Information

Difficulty: Easy

Acceptance Rate: 55.76%

Paid Only: No

Tags: Array, Hash Table, String

Problem Description

In an alien language, surprisingly, they also use English lowercase letters, but possibly in a different `order`. The `order` of the alphabet is some permutation of lowercase letters.

Given a sequence of `words` written in the alien language, and the `order` of the alphabet, return `true` if and only if the given `words` are sorted lexicographically in this alien language.

Example 1:

Input: words = ["hello", "leetcode"], order = "hlabcd efghijklmnopqrstuvwxy z"
Output: true
Explanation: As 'h' comes before 'l' in this language, then the sequence is sorted.

Example 2:

Input: words = ["word", "world", "row"], order = "worldab cefghijklmnpqstuvwxy z"
Output: false
Explanation: As 'd' comes after 'l' in this language, then words[0] > words[1], hence the sequence is unsorted.

Example 3:

Input: words = ["apple", "app"], order = "abcdefghijklmnopqrstuvwxyz"
Output: false
Explanation: The first three characters "app" match, and the second string is shorter (in size.) According to lexicographical rules "apple" > "app", because 'l' > 'Ø', where 'Ø' is defined as the blank character which is less than any other character ([More info](https://en.wikipedia.org/wiki/Lexicographical_order)).

Constraints:

* `1` <= words.length <= 100 * `1` <= words[i].length <= 20 * `order.length == 26` * All characters in `words[i]` and `order` are English lowercase letters.

Code Snippets

C++:

```
class Solution {
public:
    bool isAlienSorted(vector<string>& words, string order) {

    }
};
```

Java:

```
class Solution {
    public boolean isAlienSorted(String[] words, String order) {

    }
}
```

Python3:

```
class Solution:
    def isAlienSorted(self, words: List[str], order: str) -> bool:
```