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Solution

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288. Unique Word Abbreviation

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The **abbreviation** of a word is a concatenation of its first letter, the number of characters between the first and last letter, and its last letter. If a word has only two characters, then it is an **abbreviation** of itself.

For example:

- dog --> d1g because there is one letter between the first letter 'd' and the last letter 'g'.
- internationalization --> i18n because there are 18 letters between the first letter 'i' and the last letter 'n'.
- it --> it because any word with only two characters is an **abbreviation** of itself.

Implement the `ValidWordAbbr` class:

- `ValidWordAbbr(String[] dictionary)` Initializes the object with a `dictionary` of words.
- `boolean isUnique(string word)` Returns `true` if **either** of the following conditions are met (otherwise returns `false`):
 - There is no word in `dictionary` whose **abbreviation** is equal to `word`'s **abbreviation**.
 - For any word in `dictionary` whose **abbreviation** is equal to `word`'s **abbreviation**, that word and `word` are **the same**.

Example 1:

Input
["ValidWordAbbr", "isUnique", "isUnique", "isUnique", "isUnique", "isUnique"]
[[["deer", "door", "cake", "card"], ["dear"], ["cart"], ["cane"], ["make"], ["cake"]]]

Output
[null, false, true, false, true, true]

Explanation
`ValidWordAbbr validWordAbbr = new ValidWordAbbr(["deer", "door", "cake", "card"]);`
`validWordAbbr.isUnique("dear");` // return false, dictionary word "deer" and word "dear" have the same abbreviation "d2r" but are not the same.
`validWordAbbr.isUnique("cart");` // return true, no words in the dictionary have the abbreviation "c2t".
`validWordAbbr.isUnique("cane");` // return false, dictionary word "cake" and word "cane" have the same abbreviation "c2e" but are not the same.
`validWordAbbr.isUnique("make");` // return true, no words in the dictionary have the abbreviation "m2e".
`validWordAbbr.isUnique("cake");` // return true, because "cake" is already in the dictionary and no other word in the dictionary has "c2e" abbreviation.

Constraints:

- 1 <= dictionary.length <= 3 * 10⁴
- 1 <= dictionary[i].length <= 20
- dictionary[i] consists of lowercase English letters.
- 1 <= word.length <= 20
- word consists of lowercase English letters.
- At most 5000 calls will be made to `isUnique`.

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```
1 class ValidWordAbbr {
2
3     public ValidWordAbbr(String[] dictionary) {
4
5     }
6
7     public boolean isUnique(String word) {
8
9     }
10 }
11
12 /**
13  * Your ValidWordAbbr object will be instantiated and called as such:
14  * ValidWordAbbr obj = new ValidWordAbbr(dictionary);
15  * boolean param_1 = obj.isUnique(word);
16  */
```