Problem 422: Valid Word Square

Problem Information

Difficulty: Easy
Acceptance Rate: 42.16%
Paid Only: Yes
Tags: Array, Matrix

Problem Description

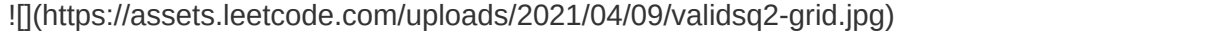
Given an array of strings `words`, return `true` _if it forms a valid**word square**_.

A sequence of strings forms a valid **word square** if the `kth` row and column read the same string, where `0 <= k < max(numRows, numColumns)`.

Example 1:

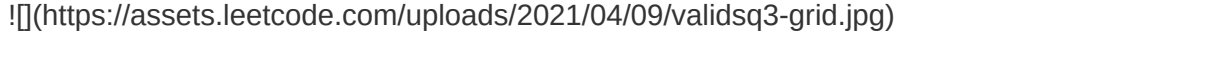
Input: words = ["abcd","bnrt","crmy","dtye"] **Output:** true **Explanation:** The 1st row and 1st column both read "abcd". The 2nd row and 2nd column both read "bnrt". The 3rd row and 3rd column both read "crmy". The 4th row and 4th column both read "dtye". Therefore, it is a valid word square.

Example 2:



Input: words = ["abcd","bnrt","crm","dt"] **Output:** true **Explanation:** The 1st row and 1st column both read "abcd". The 2nd row and 2nd column both read "bnrt". The 3rd row and 3rd column both read "crm". The 4th row and 4th column both read "dt". Therefore, it is a valid word square.

Example 3:



Input: words = ["ball","area","read","lady"] **Output:** false **Explanation:** The 3rd row reads "read" while the 3rd column reads "lead". Therefore, it is NOT a valid word square.

Constraints:

* `1 <= words.length <= 500` * `1 <= words[i].length <= 500` * `words[i]` consists of only lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
bool validWordSquare(vector<string>& words) {

}
};
```

Java:

```
class Solution {
public boolean validWordSquare(List<String> words) {

}
}
```

Python3:

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