

Problem 1662: Check If Two String Arrays are Equivalent

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given two string arrays

word1

and

word2

, return

true

if the two arrays

represent

the same string, and

false

otherwise.

A string is

represented

by an array if the array elements concatenated

in order

forms the string.

Example 1:

Input:

```
word1 = ["ab", "c"], word2 = ["a", "bc"]
```

Output:

true

Explanation:

word1 represents string "ab" + "c" -> "abc" word2 represents string "a" + "bc" -> "abc" The strings are the same, so return true.

Example 2:

Input:

```
word1 = ["a", "cb"], word2 = ["ab", "c"]
```

Output:

false

Example 3:

Input:

```
word1 = ["abc", "d", "defg"], word2 = ["abcddefg"]
```

Output:

true

Constraints:

$1 \leq \text{word1.length}, \text{word2.length} \leq 10$

3

$1 \leq \text{word1[i].length}, \text{word2[i].length} \leq 10$

3

$1 \leq \text{sum(word1[i].length)}, \text{sum(word2[i].length)} \leq 10$

3

word1[i]

and

word2[i]

consist of lowercase letters.

Code Snippets

C++:

```
class Solution {
public:
    bool arrayStringsAreEqual(vector<string>& word1, vector<string>& word2) {
        }
};
```

Java:

```
class Solution {
public boolean arrayStringsAreEqual(String[] word1, String[] word2) {
```

```
}
```

```
}
```

Python3:

```
class Solution:  
    def arrayStringsAreEqual(self, word1: List[str], word2: List[str]) -> bool:
```

Python:

```
class Solution(object):  
    def arrayStringsAreEqual(self, word1, word2):  
        """  
        :type word1: List[str]  
        :type word2: List[str]  
        :rtype: bool  
        """
```

JavaScript:

```
/**  
 * @param {string[]} word1  
 * @param {string[]} word2  
 * @return {boolean}  
 */  
var arrayStringsAreEqual = function(word1, word2) {  
  
};
```

TypeScript:

```
function arrayStringsAreEqual(word1: string[], word2: string[]): boolean {  
  
};
```

C#:

```
public class Solution {  
    public bool ArrayStringsAreEqual(string[] word1, string[] word2) {  
  
}
```

```
}
```

C:

```
bool arrayStringsAreEqual(char** word1, int word1Size, char** word2, int  
word2Size) {  
  
}
```

Go:

```
func arrayStringsAreEqual(word1 []string, word2 []string) bool {  
  
}
```

Kotlin:

```
class Solution {  
    fun arrayStringsAreEqual(word1: Array<String>, word2: Array<String>): Boolean  
    {  
  
    }  
}
```

Swift:

```
class Solution {  
    func arrayStringsAreEqual(_ word1: [String], _ word2: [String]) -> Bool {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn array_strings_are_equal(word1: Vec<String>, word2: Vec<String>) ->  
    bool {  
  
    }  
}
```

Ruby:

```
# @param {String[]} word1
# @param {String[]} word2
# @return {Boolean}
def array_strings_are_equal(word1, word2)

end
```

PHP:

```
class Solution {

    /**
     * @param String[] $word1
     * @param String[] $word2
     * @return Boolean
     */
    function arrayStringsAreEqual($word1, $word2) {

    }
}
```

Dart:

```
class Solution {
  bool arrayStringsAreEqual(List<String> word1, List<String> word2) {
    }
}
```

Scala:

```
object Solution {
  def arrayStringsAreEqual(word1: Array[String], word2: Array[String]): Boolean
  = {
    }
}
```

Elixir:

```
defmodule Solution do
  @spec array_strings_are_equal(word1 :: [String.t], word2 :: [String.t]) :: boolean
```

```
def array_strings_are_equal(word1, word2) do
  end
end
```

Erlang:

```
-spec array_strings_are_equal(Word1 :: [unicode:unicode_binary()], Word2 :: [unicode:unicode_binary()]) -> boolean().
array_strings_are_equal(Word1, Word2) ->
  .
```

Racket:

```
(define/contract (array-strings-are-equal word1 word2)
  (-> (listof string?) (listof string?) boolean?))
```

Solutions

C++ Solution:

```
/*
 * Problem: Check If Two String Arrays are Equivalent
 * Difficulty: Easy
 * Tags: array, string
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
public:
    bool arrayStringsAreEqual(vector<string>& word1, vector<string>& word2) {

    }
};
```

Java Solution:

```

/**
 * Problem: Check If Two String Arrays are Equivalent
 * Difficulty: Easy
 * Tags: array, string
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
    public boolean arrayStringsAreEqual(String[] word1, String[] word2) {

    }
}

```

Python3 Solution:

```

"""
Problem: Check If Two String Arrays are Equivalent
Difficulty: Easy
Tags: array, string

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
    def arrayStringsAreEqual(self, word1: List[str], word2: List[str]) -> bool:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def arrayStringsAreEqual(self, word1, word2):
        """
        :type word1: List[str]
        :type word2: List[str]
        :rtype: bool
        """

```

JavaScript Solution:

```
/**  
 * Problem: Check If Two String Arrays are Equivalent  
 * Difficulty: Easy  
 * Tags: array, string  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(1) to O(n) depending on approach  
 */  
  
/**  
 * @param {string[]} word1  
 * @param {string[]} word2  
 * @return {boolean}  
 */  
var arrayStringsAreEqual = function(word1, word2) {  
  
};
```

TypeScript Solution:

```
/**  
 * Problem: Check If Two String Arrays are Equivalent  
 * Difficulty: Easy  
 * Tags: array, string  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(1) to O(n) depending on approach  
 */  
  
function arrayStringsAreEqual(word1: string[], word2: string[]): boolean {  
  
};
```

C# Solution:

```
/*  
 * Problem: Check If Two String Arrays are Equivalent  
 * Difficulty: Easy
```

```

* Tags: array, string
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
public class Solution {
    public bool ArrayStringsAreEqual(string[] word1, string[] word2) {
}
}

```

C Solution:

```

/*
* Problem: Check If Two String Arrays are Equivalent
* Difficulty: Easy
* Tags: array, string
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
bool arrayStringsAreEqual(char** word1, int word1Size, char** word2, int
word2Size) {
}

```

Go Solution:

```

// Problem: Check If Two String Arrays are Equivalent
// Difficulty: Easy
// Tags: array, string
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func arrayStringsAreEqual(word1 []string, word2 []string) bool {

```

```
}
```

Kotlin Solution:

```
class Solution {  
    fun arrayStringsAreEqual(word1: Array<String>, word2: Array<String>): Boolean  
    {  
        if (word1.size != word2.size) return false  
        for (i in word1.indices) {  
            if (word1[i] != word2[i]) return false  
        }  
        return true  
    }  
}
```

Swift Solution:

```
class Solution {  
    func arrayStringsAreEqual(_ word1: [String], _ word2: [String]) -> Bool {  
        if word1.count != word2.count {  
            return false  
        }  
        for i in 0..            if word1[i] != word2[i] {  
                return false  
            }  
        }  
        return true  
    }  
}
```

Rust Solution:

```
// Problem: Check If Two String Arrays are Equivalent  
// Difficulty: Easy  
// Tags: array, string  
//  
// Approach: Use two pointers or sliding window technique  
// Time Complexity: O(n) or O(n log n)  
// Space Complexity: O(1) to O(n) depending on approach  
  
impl Solution {  
    pub fn array_strings_are_equal(word1: Vec<String>, word2: Vec<String>) -> bool {  
        let mut i = 0;  
        let mut j = 0;  
        while i < word1.len() && j < word2.len() {  
            if word1[i] != word2[j] {  
                return false  
            }  
            i += 1;  
            j += 1;  
        }  
        i == word1.len() && j == word2.len()  
    }  
}
```

Ruby Solution:

```
# @param {String[]} word1  
# @param {String[]} word2
```

```
# @return {Boolean}
def array_strings_are_equal(word1, word2)

end
```

PHP Solution:

```
class Solution {

    /**
     * @param String[] $word1
     * @param String[] $word2
     * @return Boolean
     */
    function arrayStringsAreEqual($word1, $word2) {

    }
}
```

Dart Solution:

```
class Solution {
bool arrayStringsAreEqual(List<String> word1, List<String> word2) {

}
```

Scala Solution:

```
object Solution {
def arrayStringsAreEqual(word1: Array[String], word2: Array[String]): Boolean
= {

}
```

Elixir Solution:

```
defmodule Solution do
@spec array_strings_are_equal(word1 :: [String.t], word2 :: [String.t]) :: boolean
```

```
def array_strings_are_equal(word1, word2) do
  end
end
```

Erlang Solution:

```
-spec array_strings_are_equal(Word1 :: [unicode:unicode_binary()], Word2 :: [unicode:unicode_binary()]) -> boolean().
array_strings_are_equal(Word1, Word2) ->
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```

Racket Solution:

```
(define/contract (array-strings-are-equal word1 word2)
  (-> (listof string?) (listof string?) boolean?))
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