

Problem 1745: Palindrome Partitioning IV

Problem Information

Difficulty: Hard

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given a string

s

, return

true

if it is possible to split the string

s

into three

non-empty

palindromic substrings. Otherwise, return

false

.

A string is said to be palindrome if it the same string when reversed.

Example 1:

Input:

s = "abcbdd"

Output:

true

Explanation:

"abcbdd" = "a" + "bcb" + "dd", and all three substrings are palindromes.

Example 2:

Input:

s = "bcbddxy"

Output:

false

Explanation:

s cannot be split into 3 palindromes.

Constraints:

$3 \leq s.length \leq 2000$

s

consists only of lowercase English letters.

Code Snippets

C++:

```
class Solution {  
public:  
bool checkPartitioning(string s) {  
  
}  
};
```

Java:

```
class Solution {  
public boolean checkPartitioning(String s) {  
  
}  
}
```

Python3:

```
class Solution:  
def checkPartitioning(self, s: str) -> bool:
```

Python:

```
class Solution(object):  
def checkPartitioning(self, s):  
    """  
    :type s: str  
    :rtype: bool  
    """
```

JavaScript:

```
/**  
 * @param {string} s  
 * @return {boolean}  
 */  
var checkPartitioning = function(s) {  
  
};
```

TypeScript:

```
function checkPartitioning(s: string): boolean {
```

```
};
```

C#:

```
public class Solution {  
    public bool CheckPartitioning(string s) {  
        }  
    }
```

C:

```
bool checkPartitioning(char* s) {  
    }
```

Go:

```
func checkPartitioning(s string) bool {  
    }
```

Kotlin:

```
class Solution {  
    fun checkPartitioning(s: String): Boolean {  
        }  
    }
```

Swift:

```
class Solution {  
    func checkPartitioning(_ s: String) -> Bool {  
        }  
    }
```

Rust:

```
impl Solution {  
    pub fn check_partitioning(s: String) -> bool {
```

```
}
```

```
}
```

Ruby:

```
# @param {String} s
# @return {Boolean}
def check_partitioning(s)

end
```

PHP:

```
class Solution {

    /**
     * @param String $s
     * @return Boolean
     */
    function checkPartitioning($s) {

    }
}
```

Dart:

```
class Solution {
  bool checkPartitioning(String s) {
    }
}
```

Scala:

```
object Solution {
  def checkPartitioning(s: String): Boolean = {
    }
}
```

Elixir:

```

defmodule Solution do
  @spec check_partitioning(s :: String.t) :: boolean
  def check_partitioning(s) do

    end
  end

```

Erlang:

```

-spec check_partitioning(S :: unicode:unicode_binary()) -> boolean().
check_partitioning(S) ->
  .

```

Racket:

```

(define/contract (check-partitioning s)
  (-> string? boolean?))

```

Solutions

C++ Solution:

```

/*
 * Problem: Palindrome Partitioning IV
 * Difficulty: Hard
 * Tags: string, tree, dp
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) or O(n * m) for DP table
 */

class Solution {
public:
  bool checkPartitioning(string s) {

  }
};


```

Java Solution:

```

/**
 * Problem: Palindrome Partitioning IV
 * Difficulty: Hard
 * Tags: string, tree, dp
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) or O(n * m) for DP table
 */

class Solution {
    public boolean checkPartitioning(String s) {
        return false;
    }
}

```

Python3 Solution:

```

"""
Problem: Palindrome Partitioning IV
Difficulty: Hard
Tags: string, tree, dp

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) or O(n * m) for DP table
"""

class Solution:
    def checkPartitioning(self, s: str) -> bool:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def checkPartitioning(self, s):
        """
:type s: str
:rtype: bool
"""

```

JavaScript Solution:

```
/**  
 * Problem: Palindrome Partitioning IV  
 * Difficulty: Hard  
 * Tags: string, tree, dp  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(n) or O(n * m) for DP table  
 */  
  
/**  
 * @param {string} s  
 * @return {boolean}  
 */  
var checkPartitioning = function(s) {  
  
};
```

TypeScript Solution:

```
/**  
 * Problem: Palindrome Partitioning IV  
 * Difficulty: Hard  
 * Tags: string, tree, dp  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(n) or O(n * m) for DP table  
 */  
  
function checkPartitioning(s: string): boolean {  
  
};
```

C# Solution:

```
/*  
 * Problem: Palindrome Partitioning IV  
 * Difficulty: Hard  
 * Tags: string, tree, dp  
 */
```

```

* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) or O(n * m) for DP table
*/
public class Solution {
    public bool CheckPartitioning(string s) {
        }
    }
}

```

C Solution:

```

/*
* Problem: Palindrome Partitioning IV
* Difficulty: Hard
* Tags: string, tree, dp
*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) or O(n * m) for DP table
*/
bool checkPartitioning(char* s) {
}

```

Go Solution:

```

// Problem: Palindrome Partitioning IV
// Difficulty: Hard
// Tags: string, tree, dp
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) or O(n * m) for DP table

func checkPartitioning(s string) bool {
}

```

Kotlin Solution:

```
class Solution {  
    fun checkPartitioning(s: String): Boolean {  
  
    }  
}
```

Swift Solution:

```
class Solution {  
    func checkPartitioning(_ s: String) -> Bool {  
  
    }  
}
```

Rust Solution:

```
// Problem: Palindrome Partitioning IV  
// Difficulty: Hard  
// Tags: string, tree, dp  
//  
// Approach: String manipulation with hash map or two pointers  
// Time Complexity: O(n) or O(n log n)  
// Space Complexity: O(n) or O(n * m) for DP table  
  
impl Solution {  
    pub fn check_partitioning(s: String) -> bool {  
  
    }  
}
```

Ruby Solution:

```
# @param {String} s  
# @return {Boolean}  
def check_partitioning(s)  
  
end
```

PHP Solution:

```
class Solution {  
  
    /**  
     * @param String $s  
     * @return Boolean  
     */  
    function checkPartitioning($s) {  
  
    }  
}
```

Dart Solution:

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class Solution {  
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```
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  )
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