

Problem 767: Reorganize String

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given a string

s

, rearrange the characters of

s

so that any two adjacent characters are not the same.

Return

any possible rearrangement of

s

or return

""

if not possible

Example 1:

Input:

s = "aab"

Output:

"aba"

Example 2:

Input:

s = "aaab"

Output:

""

Constraints:

$1 \leq s.length \leq 500$

s

consists of lowercase English letters.

Code Snippets

C++:

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

Java:

```
class Solution {  
    public String reorganizeString(String s) {  
  
    }  
}
```

Python3:

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

Python:

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

JavaScript:

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

TypeScript:

```
function reorganizeString(s: string): string {  
  
};
```

C#:

```
public class Solution {  
    public string ReorganizeString(string s) {  
  
    }  
}
```

C:

```
char* reorganizeString(char* s) {  
}  
}
```

Go:

```
func reorganizeString(s string) string {  
}  
}
```

Kotlin:

```
class Solution {  
    fun reorganizeString(s: String): String {  
        }  
    }  
}
```

Swift:

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

Rust:

```
impl Solution {  
    pub fn reorganize_string(s: String) -> String {  
        }  
    }  
}
```

Ruby:

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

PHP:

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

Dart:

```
class Solution {  
    String reorganizeString(String s) {  
  
    }  
}
```

Scala:

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

Elixir:

```
defmodule Solution do  
  @spec reorganize_string(s :: String.t) :: String.t  
  def reorganize_string(s) do  
  
  end  
end
```

Erlang:

```
-spec reorganize_string(S :: unicode:unicode_binary()) ->  
  unicode:unicode_binary().  
reorganize_string(S) ->
```

.

Racket:

```
(define/contract (reorganize-string s)
  (-> string? string?))
```

Solutions

C++ Solution:

```
/*
 * Problem: Reorganize String
 * Difficulty: Medium
 * Tags: string, greedy, hash, sort, queue, heap
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public:
    string reorganizeString(string s) {

    }
};
```

Java Solution:

```
/**
 * Problem: Reorganize String
 * Difficulty: Medium
 * Tags: string, greedy, hash, sort, queue, heap
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */
```

```
class Solution {  
    public String reorganizeString(String s) {  
  
    }  
}
```

Python3 Solution:

```
"""  
  
Problem: Reorganize String  
Difficulty: Medium  
Tags: string, greedy, hash, sort, queue, heap  
  
Approach: String manipulation with hash map or two pointers  
Time Complexity: O(n) or O(n log n)  
Space Complexity: O(n) for hash map  
"""  
  
class Solution:  
    def reorganizeString(self, s: str) -> str:  
        # TODO: Implement optimized solution  
        pass
```

Python Solution:

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

JavaScript Solution:

```
/**  
 * Problem: Reorganize String  
 * Difficulty: Medium  
 * Tags: string, greedy, hash, sort, queue, heap  
 * Approach: String manipulation with hash map or two pointers
```

```

 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

/** 
 * @param {string} s
 * @return {string}
 */
var reorganizeString = function(s) {

};

```

TypeScript Solution:

```

/** 
 * Problem: Reorganize String
 * Difficulty: Medium
 * Tags: string, greedy, hash, sort, queue, heap
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

function reorganizeString(s: string): string {
}

```

C# Solution:

```

/*
 * Problem: Reorganize String
 * Difficulty: Medium
 * Tags: string, greedy, hash, sort, queue, heap
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

public class Solution {

```

```
public string ReorganizeString(string s) {  
    }  
}
```

C Solution:

```
/*  
 * Problem: Reorganize String  
 * Difficulty: Medium  
 * Tags: string, greedy, hash, sort, queue, heap  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(n) for hash map  
 */  
  
char* reorganizeString(char* s) {  
}
```

Go Solution:

```
// Problem: Reorganize String  
// Difficulty: Medium  
// Tags: string, greedy, hash, sort, queue, heap  
//  
// Approach: String manipulation with hash map or two pointers  
// Time Complexity: O(n) or O(n log n)  
// Space Complexity: O(n) for hash map  
  
func reorganizeString(s string) string {  
}
```

Kotlin Solution:

```
class Solution {  
    fun reorganizeString(s: String): String {  
    }
```

}

Swift Solution:

```
class Solution {
    func reorganizeString(_ s: String) -> String {
        ...
    }
}
```

Rust Solution:

```
// Problem: Reorganize String
// Difficulty: Medium
// Tags: string, greedy, hash, sort, queue, heap
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

impl Solution {
    pub fn reorganize_string(s: String) -> String {
        }

        }
}
```

Ruby Solution:

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

end
```

PHP Solution:

```
class Solution {  
  
    /**  
     * @param String $s  
     * @return String  
    */
```

```
*/  
function reorganizeString($s) {  
  
}  
}  
}
```

Dart Solution:

```
class Solution {  
String reorganizeString(String s) {  
  
}  
}  
}
```

Scala Solution:

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

Elixir Solution:

```
defmodule Solution do  
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unicode:unicode_binary().  
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Racket Solution:

```
(define/contract (reorganize-string s)
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)
```