

Problem 3517: Smallest Palindromic Rearrangement I

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given a

palindromic

string

s

Return the

lexicographically smallest

palindromic

permutation

of

s

Example 1:

Input:

s = "z"

Output:

"z"

Explanation:

A string of only one character is already the lexicographically smallest palindrome.

Example 2:

Input:

s = "babab"

Output:

"abbba"

Explanation:

Rearranging

"babab"

→

"abbba"

gives the smallest lexicographic palindrome.

Example 3:

Input:

```
s = "daccad"
```

Output:

```
"acddca"
```

Explanation:

Rearranging

```
"daccad"
```

→

```
"acddca"
```

gives the smallest lexicographic palindrome.

Constraints:

```
1 <= s.length <= 10
```

5

s

consists of lowercase English letters.

s

is guaranteed to be palindromic.

Code Snippets

C++:

```
class Solution {  
public:
```

```
string smallestPalindrome(string s) {  
}  
};
```

Java:

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

Python3:

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

Python:

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

JavaScript:

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

TypeScript:

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

C#:

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

C:

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

Go:

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

Kotlin:

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

Swift:

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

Rust:

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

Ruby:

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

end
```

PHP:

```
class Solution {

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

    }
}
```

Dart:

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

Scala:

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

Elixir:

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

```
end  
end
```

Erlang:

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

Racket:

```
(define/contract (smallest-palindrome s)  
(-> string? string?)  
)
```

Solutions

C++ Solution:

```
/*  
* Problem: Smallest Palindromic Rearrangement I  
* Difficulty: Medium  
* Tags: string, graph, sort  
*  
* Approach: String manipulation with hash map or two pointers  
* Time Complexity: O(n) or O(n log n)  
* Space Complexity: O(1) to O(n) depending on approach  
*/  
  
class Solution {  
public:  
    string smallestPalindrome(string s) {  
  
    }  
};
```

Java Solution:

```

/**
 * Problem: Smallest Palindromic Rearrangement I
 * Difficulty: Medium
 * Tags: string, graph, sort
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
    public String smallestPalindrome(String s) {
        return null;
    }
}

```

Python3 Solution:

```

"""
Problem: Smallest Palindromic Rearrangement I
Difficulty: Medium
Tags: string, graph, sort

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

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

```

Python Solution:

```

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

```

JavaScript Solution:

```
/**  
 * Problem: Smallest Palindromic Rearrangement I  
 * Difficulty: Medium  
 * Tags: string, graph, sort  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(1) to O(n) depending on approach  
 */  
  
/**  
 * @param {string} s  
 * @return {string}  
 */  
var smallestPalindrome = function(s) {  
  
};
```

TypeScript Solution:

```
/**  
 * Problem: Smallest Palindromic Rearrangement I  
 * Difficulty: Medium  
 * Tags: string, graph, sort  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(1) to O(n) depending on approach  
 */  
  
function smallestPalindrome(s: string): string {  
  
};
```

C# Solution:

```
/*  
 * Problem: Smallest Palindromic Rearrangement I  
 * Difficulty: Medium  
 * Tags: string, graph, sort  
 */
```

```

* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
public class Solution {
    public string SmallestPalindrome(string s) {
        return null;
    }
}

```

C Solution:

```

/*
 * Problem: Smallest Palindromic Rearrangement I
 * Difficulty: Medium
 * Tags: string, graph, sort
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
*/
char* smallestPalindrome(char* s) {
    return null;
}

```

Go Solution:

```

// Problem: Smallest Palindromic Rearrangement I
// Difficulty: Medium
// Tags: string, graph, sort
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func smallestPalindrome(s string) string {
}

```

Kotlin Solution:

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

Swift Solution:

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

Rust Solution:

```
// Problem: Smallest Palindromic Rearrangement I  
// Difficulty: Medium  
// Tags: string, graph, sort  
//  
// Approach: String manipulation with hash map or two pointers  
// Time Complexity: O(n) or O(n log n)  
// Space Complexity: O(1) to O(n) depending on approach  
  
impl Solution {  
    pub fn smallest_palindrome(s: String) -> String {  
  
    }  
}
```

Ruby Solution:

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

PHP Solution:

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

Dart Solution:

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

Scala Solution:

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

Elixir Solution:

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

Erlang Solution:

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```
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  (-> string? string?))
)
```