

# 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

s

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) {

}

}

```

### 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) {

}
}

```

### 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) {

}

```

### 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 = {

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### Elixir Solution:

```

defmodule Solution do
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  def smallest_palindrome(s) do

  end

end

```

### Erlang Solution:

```

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

```

### Racket Solution:

```
(define/contract (smallest-palindrome s)
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