

Problem 344: Reverse String

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Write a function that reverses a string. The input string is given as an array of characters

s

.

You must do this by modifying the input array

in-place

with

$O(1)$

extra memory.

Example 1:

Input:

```
s = ["h", "e", "l", "l", "o"]
```

Output:

```
["o", "l", "l", "e", "h"]
```

Example 2:

Input:

```
s = ["H","a","n","n","a","h"]
```

Output:

```
["h","a","n","n","a","H"]
```

Constraints:

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

5

s[i]

is a

printable ascii character

Code Snippets

C++:

```
class Solution {
public:
    void reverseString(vector<char>& s) {
        }
};
```

Java:

```
class Solution {
    public void reverseString(char[] s) {
```

```
}
```

```
}
```

Python3:

```
class Solution:  
    def reverseString(self, s: List[str]) -> None:  
        """  
        Do not return anything, modify s in-place instead.  
        """
```

Python:

```
class Solution(object):  
    def reverseString(self, s):  
        """  
        :type s: List[str]  
        :rtype: None Do not return anything, modify s in-place instead.  
        """
```

JavaScript:

```
/**  
 * @param {character[]} s  
 * @return {void} Do not return anything, modify s in-place instead.  
 */  
var reverseString = function(s) {  
  
};
```

TypeScript:

```
/**  
 * Do not return anything, modify s in-place instead.  
 */  
function reverseString(s: string[]): void {  
  
};
```

C#:

```
public class Solution {  
    public void ReverseString(char[] s) {  
        }  
    }
```

C:

```
void reverseString(char* s, int sSize) {  
    }
```

Go:

```
func reverseString(s []byte) {  
    }
```

Kotlin:

```
class Solution {  
    fun reverseString(s: CharArray): Unit {  
        }  
    }
```

Swift:

```
class Solution {  
    func reverseString(_ s: inout [Character]) {  
        }  
    }
```

Rust:

```
impl Solution {  
    pub fn reverse_string(s: &mut Vec<char>) {  
        }  
    }
```

Ruby:

```
# @param {Character[]} s
# @return {Void} Do not return anything, modify s in-place instead.
def reverse_string(s)

end
```

PHP:

```
class Solution {

    /**
     * @param String[] $s
     * @return NULL
     */
    function reverseString(&$s) {

    }
}
```

Dart:

```
class Solution {
void reverseString(List<String> s) {

}
```

Scala:

```
object Solution {
def reverseString(s: Array[Char]): Unit = {

}
```

Solutions

C++ Solution:

```
/*
* Problem: Reverse String
```

```

* 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:
void reverseString(vector<char>& s) {

}
};

```

Java Solution:

```

/**
 * Problem: Reverse String
 * 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 void reverseString(char[] s) {

}
};

```

Python3 Solution:

```

"""
Problem: Reverse String
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 reverseString(self, s: List[str]) -> None:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def reverseString(self, s):
        """
        :type s: List[str]
        :rtype: None Do not return anything, modify s in-place instead.
        """

```

JavaScript Solution:

```

/**
 * Problem: Reverse String
 * Difficulty: Easy
 * Tags: array, string
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

/**
 * @param {character[]} s
 * @return {void} Do not return anything, modify s in-place instead.
 */
var reverseString = function(s) {
}

```

TypeScript Solution:

```

/**
 * Problem: Reverse String
 * Difficulty: Easy
 * Tags: array, string
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 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

/**
Do not return anything, modify s in-place instead.
*/
function reverseString(s: string[]): void {

};

```

C# Solution:

```

/*
 * Problem: Reverse String
 * 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 void ReverseString(char[] s) {
        }
    }
}
```

C Solution:

```

/*
 * Problem: Reverse String
 * 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
*/
void reverseString(char* s, int sSize) {
}

```

Go Solution:

```

// Problem: Reverse String
// 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 reverseString(s []byte) {
}

```

Kotlin Solution:

```

class Solution {
    fun reverseString(s: CharArray): Unit {
        }
    }
}
```

Swift Solution:

```

class Solution {
    func reverseString(_ s: inout [Character]) {
        }
    }
}
```

Rust Solution:

```

// Problem: Reverse String
// Difficulty: Easy
// Tags: array, string
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// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
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impl Solution {
    pub fn reverse_string(s: &mut Vec<char>) {
        }

    }
}

```

Ruby Solution:

```

# @param {Character[]} s
# @return {Void} Do not return anything, modify s in-place instead.
def reverse_string(s)

end

```

PHP Solution:

```

class Solution {

    /**
     * @param String[] $s
     * @return NULL
     */
    function reverseString(&$s) {
        }
    }
}

```

Dart Solution:

```

class Solution {
    void reverseString(List<String> s) {
        }
    }
}

```

Scala Solution:

```
object Solution {  
    def reverseString(s: Array[Char]): Unit = {  
        }  
        }  
}
```