

Problem 541: Reverse String II

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given a string

s

and an integer

k

, reverse the first

k

characters for every

2k

characters counting from the start of the string.

If there are fewer than

k

characters left, reverse all of them. If there are less than

2k

but greater than or equal to

k

characters, then reverse the first

k

characters and leave the other as original.

Example 1:

Input:

s = "abcdefg", k = 2

Output:

"bacdfeg"

Example 2:

Input:

s = "abcd", k = 2

Output:

"bacd"

Constraints:

$1 \leq s.length \leq 10$

4

s

consists of only lowercase English letters.

$1 \leq k \leq 10$

4

Code Snippets

C++:

```
class Solution {  
public:  
    string reverseStr(string s, int k) {  
  
    }  
};
```

Java:

```
class Solution {  
public String reverseStr(String s, int k) {  
  
}  
}
```

Python3:

```
class Solution:  
    def reverseStr(self, s: str, k: int) -> str:
```

Python:

```
class Solution(object):  
    def reverseStr(self, s, k):  
        """  
        :type s: str  
        :type k: int  
        :rtype: str  
        """
```

JavaScript:

```
/**  
 * @param {string} s  
 * @param {number} k  
 * @return {string}  
 */  
var reverseStr = function(s, k) {  
};
```

TypeScript:

```
function reverseStr(s: string, k: number): string {  
};
```

C#:

```
public class Solution {  
    public string ReverseStr(string s, int k) {  
        }  
    }
```

C:

```
char* reverseStr(char* s, int k) {  
}
```

Go:

```
func reverseStr(s string, k int) string {  
}
```

Kotlin:

```
class Solution {  
    fun reverseStr(s: String, k: Int): String {  
        }  
    }
```

Swift:

```
class Solution {  
    func reverseStr(_ s: String, _ k: Int) -> String {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn reverse_str(s: String, k: i32) -> String {  
  
    }  
}
```

Ruby:

```
# @param {String} s  
# @param {Integer} k  
# @return {String}  
def reverse_str(s, k)  
  
end
```

PHP:

```
class Solution {  
  
    /**  
     * @param String $s  
     * @param Integer $k  
     * @return String  
     */  
    function reverseStr($s, $k) {  
  
    }  
}
```

Dart:

```
class Solution {  
    String reverseStr(String s, int k) {
```

```
}
```

```
}
```

Scala:

```
object Solution {  
    def reverseStr(s: String, k: Int): String = {  
  
    }  
    }  
}
```

Elixir:

```
defmodule Solution do  
  @spec reverse_str(s :: String.t, k :: integer) :: String.t  
  def reverse_str(s, k) do  
  
  end  
  end
```

Erlang:

```
-spec reverse_str(S :: unicode:unicode_binary(), K :: integer()) ->  
unicode:unicode_binary().  
reverse_str(S, K) ->  
.
```

Racket:

```
(define/contract (reverse-str s k)  
  (-> string? exact-integer? string?)  
)
```

Solutions

C++ Solution:

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

```

* 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:
    string reverseStr(string s, int k) {

    }
};

```

Java Solution:

```

/**
 * Problem: Reverse String II
 * 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 String reverseStr(String s, int k) {

}
}

```

Python3 Solution:

```

"""
Problem: Reverse String II
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 reverseStr(self, s: str, k: int) -> str:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def reverseStr(self, s, k):
        """
        :type s: str
        :type k: int
        :rtype: str
        """

```

JavaScript Solution:

```

/**
 * Problem: Reverse String II
 * 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
 */

/**
 * @param {string} s
 * @param {number} k
 * @return {string}
 */
var reverseStr = function(s, k) {

};


```

TypeScript Solution:

```

/**
 * Problem: Reverse String II
 * 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
 */

function reverseStr(s: string, k: number): string {

};

```

C# Solution:

```

/*
 * Problem: Reverse String II
 * 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 string ReverseStr(string s, int k) {

    }
}

```

C Solution:

```

/*
 * Problem: Reverse String II
 * 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

```

```
*/  
  
char* reverseStr(char* s, int k) {  
  
}
```

Go Solution:

```
// Problem: Reverse String II  
// 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 reverseStr(s string, k int) string {  
  
}
```

Kotlin Solution:

```
class Solution {  
    fun reverseStr(s: String, k: Int): String {  
  
    }  
}
```

Swift Solution:

```
class Solution {  
    func reverseStr(_ s: String, _ k: Int) -> String {  
  
    }  
}
```

Rust Solution:

```
// Problem: Reverse String II  
// 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

impl Solution {
    pub fn reverse_str(s: String, k: i32) -> String {
        }

    }
}

```

Ruby Solution:

```

# @param {String} s
# @param {Integer} k
# @return {String}
def reverse_str(s, k)

end

```

PHP Solution:

```

class Solution {

    /**
     * @param String $s
     * @param Integer $k
     * @return String
     */
    function reverseStr($s, $k) {

    }
}

```

Dart Solution:

```

class Solution {
    String reverseStr(String s, int k) {
        }

    }
}

```

Scala Solution:

```
object Solution {  
    def reverseStr(s: String, k: Int): String = {  
  
    }  
}
```

Elixir Solution:

```
defmodule Solution do  
  @spec reverse_str(s :: String.t, k :: integer) :: String.t  
  def reverse_str(s, k) do  
  
  end  
end
```

Erlang Solution:

```
-spec reverse_str(S :: unicode:unicode_binary(), K :: integer()) ->  
unicode:unicode_binary().  
reverse_str(S, K) ->  
.
```

Racket Solution:

```
(define/contract (reverse-str s k)  
  (-> string? exact-integer? string?)  
)
```