

# Problem 796: Rotate String

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Given two strings

s

and

goal

, return

true

if and only if

s

can become

goal

after some number of

shifts

on

s

.

A

shift

on

s

consists of moving the leftmost character of

s

to the rightmost position.

For example, if

s = "abcde"

, then it will be

"bcdea"

after one shift.

Example 1:

Input:

s = "abcde", goal = "cdeab"

Output:

true

Example 2:

Input:

```
s = "abcde", goal = "abced"
```

Output:

```
false
```

Constraints:

```
1 <= s.length, goal.length <= 100
```

```
s
```

and

```
goal
```

consist of lowercase English letters.

## Code Snippets

**C++:**

```
class Solution {  
public:  
    bool rotateString(string s, string goal) {  
        }  
    };
```

**Java:**

```
class Solution {  
public boolean rotateString(String s, String goal) {  
    }  
}
```

### **Python3:**

```
class Solution:  
    def rotateString(self, s: str, goal: str) -> bool:
```

### **Python:**

```
class Solution(object):  
    def rotateString(self, s, goal):  
        """  
        :type s: str  
        :type goal: str  
        :rtype: bool  
        """
```

### **JavaScript:**

```
/**  
 * @param {string} s  
 * @param {string} goal  
 * @return {boolean}  
 */  
var rotateString = function(s, goal) {  
  
};
```

### **TypeScript:**

```
function rotateString(s: string, goal: string): boolean {  
  
};
```

### **C#:**

```
public class Solution {  
    public bool RotateString(string s, string goal) {  
  
    }  
}
```

### **C:**

```
bool rotateString(char* s, char* goal) {  
}  
}
```

**Go:**

```
func rotateString(s string, goal string) bool {  
}  
}
```

**Kotlin:**

```
class Solution {  
    fun rotateString(s: String, goal: String): Boolean {  
        }  
    }  
}
```

**Swift:**

```
class Solution {  
    func rotateString(_ s: String, _ goal: String) -> Bool {  
        }  
    }  
}
```

**Rust:**

```
impl Solution {  
    pub fn rotate_string(s: String, goal: String) -> bool {  
        }  
    }  
}
```

**Ruby:**

```
# @param {String} s  
# @param {String} goal  
# @return {Boolean}  
def rotate_string(s, goal)  
  
end
```

**PHP:**

```
class Solution {  
  
    /**  
     * @param String $s  
     * @param String $goal  
     * @return Boolean  
     */  
    function rotateString($s, $goal) {  
  
    }  
}
```

**Dart:**

```
class Solution {  
bool rotateString(String s, String goal) {  
  
}  
}
```

**Scala:**

```
object Solution {  
def rotateString(s: String, goal: String): Boolean = {  
  
}  
}
```

**Elixir:**

```
defmodule Solution do  
@spec rotate_string(s :: String.t, goal :: String.t) :: boolean  
def rotate_string(s, goal) do  
  
end  
end
```

**Erlang:**

```
-spec rotate_string(S :: unicode:unicode_binary(), Goal ::  
unicode:unicode_binary()) -> boolean().
```

```
rotate_string(S, Goal) ->
.
```

## Racket:

```
(define/contract (rotate-string s goal)
(-> string? string? boolean?))
```

# Solutions

## C++ Solution:

```
/*
 * Problem: Rotate String
 * Difficulty: Easy
 * Tags: string
 *
 * 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:
    bool rotateString(string s, string goal) {

    }
};
```

## Java Solution:

```
/**
 * Problem: Rotate String
 * Difficulty: Easy
 * Tags: string
 *
 * 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
```

```
*/\n\n\nclass Solution {\n    public boolean rotateString(String s, String goal) {\n\n        }\n    }\n}
```

### Python3 Solution:

```
'''\n\nProblem: Rotate String\nDifficulty: Easy\nTags: string\n\nApproach: String manipulation with hash map or two pointers\nTime Complexity: O(n) or O(n log n)\nSpace Complexity: O(1) to O(n) depending on approach\n'''
```

```
class Solution:\n    def rotateString(self, s: str, goal: str) -> bool:\n        # TODO: Implement optimized solution\n        pass
```

### Python Solution:

```
class Solution(object):\n    def rotateString(self, s, goal):\n\n        '''\n        :type s: str\n        :type goal: str\n        :rtype: bool\n        '''
```

### JavaScript Solution:

```
/**\n * Problem: Rotate String\n * Difficulty: Easy\n * Tags: string
```

```

/*
 * 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
 * @param {string} goal
 * @return {boolean}
 */
var rotateString = function(s, goal) {

};

```

### TypeScript Solution:

```

/**
 * Problem: Rotate String
 * Difficulty: Easy
 * Tags: string
 *
 * 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 rotateString(s: string, goal: string): boolean {

};

```

### C# Solution:

```

/*
 * Problem: Rotate String
 * Difficulty: Easy
 * Tags: string
 *
 * 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

```

```
*/\n\npublic class Solution {\n    public bool RotateString(string s, string goal) {\n        }\n    }\n}
```

### C Solution:

```
/*\n * Problem: Rotate String\n * Difficulty: Easy\n * Tags: string\n *\n * Approach: String manipulation with hash map or two pointers\n * Time Complexity: O(n) or O(n log n)\n * Space Complexity: O(1) to O(n) depending on approach\n */\n\nbool rotateString(char* s, char* goal) {\n}\n
```

### Go Solution:

```
// Problem: Rotate String\n// Difficulty: Easy\n// Tags: string\n//\n// Approach: String manipulation with hash map or two pointers\n// Time Complexity: O(n) or O(n log n)\n// Space Complexity: O(1) to O(n) depending on approach\n\nfunc rotateString(s string, goal string) bool {\n}
```

### Kotlin Solution:

```
class Solution {  
    fun rotateString(s: String, goal: String): Boolean {  
        }  
        }  
}
```

### Swift Solution:

```
class Solution {  
    func rotateString(_ s: String, _ goal: String) -> Bool {  
        }  
        }  
}
```

### Rust Solution:

```
// Problem: Rotate String  
// Difficulty: Easy  
// Tags: string  
//  
// 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 rotate_string(s: String, goal: String) -> bool {  
        }  
        }  
}
```

### Ruby Solution:

```
# @param {String} s  
# @param {String} goal  
# @return {Boolean}  
def rotate_string(s, goal)  
  
end
```

### PHP Solution:

```
class Solution {  
  
    /**  
     * @param String $s  
     * @param String $goal  
     * @return Boolean  
     */  
    function rotateString($s, $goal) {  
  
    }  
}
```

### Dart Solution:

```
class Solution {  
bool rotateString(String s, String goal) {  
  
}  
}
```

### Scala Solution:

```
object Solution {  
def rotateString(s: String, goal: String): Boolean = {  
  
}  
}
```

### Elixir Solution:

```
defmodule Solution do  
@spec rotate_string(s :: String.t, goal :: String.t) :: boolean  
def rotate_string(s, goal) do  
  
end  
end
```

### Erlang Solution:

```
-spec rotate_string(S :: unicode:unicode_binary(), Goal ::  
unicode:unicode_binary()) -> boolean().  
rotate_string(S, Goal) ->
```

**Racket Solution:**

```
(define/contract (rotate-string s goal)
  (-> string? string? boolean?))
)
```