

# Problem 680: Valid Palindrome II

## Problem Information

Difficulty: Easy

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Given a string

`s`

, return

`true`

if the

`s`

can be palindrome after deleting

at most one

character from it

.

Example 1:

Input:

`s = "aba"`

Output:

true

Example 2:

Input:

s = "abca"

Output:

true

Explanation:

You could delete the character 'c'.

Example 3:

Input:

s = "abc"

Output:

false

Constraints:

$1 \leq s.length \leq 10$

s

s

consists of lowercase English letters.

## Code Snippets

### C++:

```
class Solution {  
public:  
    bool validPalindrome(string s) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public boolean validPalindrome(String s) {  
  
    }  
}
```

### Python3:

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

### Python:

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

### JavaScript:

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

**TypeScript:**

```
function validPalindrome(s: string): boolean {  
  
};
```

**C#:**

```
public class Solution {  
    public bool ValidPalindrome(string s) {  
  
    }  
}
```

**C:**

```
bool validPalindrome(char* s) {  
  
}
```

**Go:**

```
func validPalindrome(s string) bool {  
  
}
```

**Kotlin:**

```
class Solution {  
    fun validPalindrome(s: String): Boolean {  
  
    }  
}
```

**Swift:**

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

**Rust:**

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

### Ruby:

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

### PHP:

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

### Dart:

```
class Solution {  
  bool validPalindrome(String s) {  
  
  }  
}
```

### Scala:

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

### Elixir:

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

  end

end
```

### Erlang:

```
-spec valid_palindrome(S :: unicode:unicode_binary()) -> boolean().
valid_palindrome(S) ->
.
```

### Racket:

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

## Solutions

### C++ Solution:

```
/*
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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:
    bool validPalindrome(string s) {

    }

};
```

## Java Solution:

```
/**
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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 boolean validPalindrome(String s) {

    }
}
```

## Python3 Solution:

```
"""
Problem: Valid Palindrome II
Difficulty: Easy
Tags: array, string, greedy

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 validPalindrome(self, s: str) -> bool:
        # TODO: Implement optimized solution
        pass
```

## Python Solution:

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

```
"""
```

### JavaScript Solution:

```
/**
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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
 * @return {boolean}
 */
var validPalindrome = function(s) {

};
```

### TypeScript Solution:

```
/**
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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 validPalindrome(s: string): boolean {

};
```

### C# Solution:



```

/*
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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 bool ValidPalindrome(string s) {

    }
}

```

### C Solution:

```

/*
 * Problem: Valid Palindrome II
 * Difficulty: Easy
 * Tags: array, string, greedy
 *
 * 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
 */

bool validPalindrome(char* s) {

}

```

### Go Solution:

```

// Problem: Valid Palindrome II
// Difficulty: Easy
// Tags: array, string, greedy
//
// 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 validPalindrome(s string) bool {  
  
}
```

### Kotlin Solution:

```
class Solution {  
    fun validPalindrome(s: String): Boolean {  
  
    }  
}
```

### Swift Solution:

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

### Rust Solution:

```
// Problem: Valid Palindrome II  
// Difficulty: Easy  
// Tags: array, string, greedy  
//  
// 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 valid_palindrome(s: String) -> bool {  
  
    }  
}
```

### Ruby Solution:

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

```
end
```

### PHP Solution:

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

### Dart Solution:

```
class Solution {  
    bool validPalindrome(String s) {  
  
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}
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### Scala Solution:

```
object Solution {  
    def validPalindrome(s: String): Boolean = {  
  
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defmodule Solution do  
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    def valid_palindrome(s) do  
  
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-spec valid_palindrome(S :: unicode:unicode_binary()) -> boolean().  
valid_palindrome(S) ->  
.
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### Racket Solution:

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