

# Problem 161: One Edit Distance

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 0.00%

**Paid Only:** No

## Problem Description

Given two strings

s

and

t

, return

true

if they are both one edit distance apart, otherwise return

false

.

A string

s

is said to be one distance apart from a string

t

if you can:

Insert

exactly one

character into

s

to get

t

.

Delete

exactly one

character from

s

to get

t

.

Replace

exactly one

character of

s

with

a different character

to get

t

.

Example 1:

Input:

s = "ab", t = "acb"

Output:

true

Explanation:

We can insert 'c' into s to get t.

Example 2:

Input:

s = "", t = ""

Output:

false

Explanation:

We cannot get t from s by only one step.

Constraints:

$0 \leq s.length, t.length \leq 10$

4

s

and

t

consist of lowercase letters, uppercase letters, and digits.

## Code Snippets

### C++:

```
class Solution {  
public:  
    bool isOneEditDistance(string s, string t) {  
  
    }  
};
```

### Java:

```
class Solution {  
public boolean isOneEditDistance(String s, String t) {  
  
}  
}
```

### Python3:

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

### Python:

```
class Solution(object):  
    def isOneEditDistance(self, s, t):
```

```
"""
:type s: str
:type t: str
:rtype: bool
"""
```

### JavaScript:

```
/**
 * @param {string} s
 * @param {string} t
 * @return {boolean}
 */
var isOneEditDistance = function(s, t) {

};
```

### TypeScript:

```
function isOneEditDistance(s: string, t: string): boolean {
}
```

### C#:

```
public class Solution {
public bool IsOneEditDistance(string s, string t) {

}
```

### C:

```
bool isOneEditDistance(char* s, char* t) {
}
```

### Go:

```
func isOneEditDistance(s string, t string) bool {
}
```

**Kotlin:**

```
class Solution {  
    fun isOneEditDistance(s: String, t: String): Boolean {  
  
    }  
}
```

**Swift:**

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

**Rust:**

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

**Ruby:**

```
# @param {String} s  
# @param {String} t  
# @return {Boolean}  
def is_one_edit_distance(s, t)  
  
end
```

**PHP:**

```
class Solution {  
  
    /**  
     * @param String $s  
     * @param String $t  
     * @return Boolean  
     */  
    function isOneEditDistance($s, $t) {
```

```
}
```

```
}
```

### Dart:

```
class Solution {  
    bool isOneEditDistance(String s, String t) {  
  
    }  
}
```

### Scala:

```
object Solution {  
    def isOneEditDistance(s: String, t: String): Boolean = {  
  
    }  
}
```

### Elixir:

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

### Erlang:

```
-spec is_one_edit_distance(S :: unicode:unicode_binary(), T ::  
  unicode:unicode_binary()) -> boolean().  
is_one_edit_distance(S, T) ->  
.
```

### Racket:

```
(define/contract (is-one-edit-distance s t)  
  (-> string? string? boolean?)  
)
```

## Solutions

### C++ Solution:

```
/*
 * Problem: One Edit Distance
 * Difficulty: Medium
 * 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:
    bool isOneEditDistance(string s, string t) {

    }
};
```

### Java Solution:

```
/**
 * Problem: One Edit Distance
 * Difficulty: Medium
 * 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 boolean isOneEditDistance(String s, String t) {

    }
}
```

### Python3 Solution:

```

"""
Problem: One Edit Distance
Difficulty: Medium
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 isOneEditDistance(self, s: str, t: str) -> bool:
    # TODO: Implement optimized solution
    pass

```

### Python Solution:

```

class Solution(object):

def isOneEditDistance(self, s, t):
    """
:type s: str
:type t: str
:rtype: bool
"""

```

### JavaScript Solution:

```

/**
 * Problem: One Edit Distance
 * Difficulty: Medium
 * 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 {string} t
 * @return {boolean}
 */

```

```
var isOneEditDistance = function(s, t) {  
};
```

### TypeScript Solution:

```
/**  
 * Problem: One Edit Distance  
 * Difficulty: Medium  
 * 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 isOneEditDistance(s: string, t: string): boolean {  
};
```

### C# Solution:

```
/*  
 * Problem: One Edit Distance  
 * Difficulty: Medium  
 * 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 bool IsOneEditDistance(string s, string t) {  
        }  
    }  
}
```

### C Solution:

```

/*
 * Problem: One Edit Distance
 * Difficulty: Medium
 * 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
 */

bool isOneEditDistance(char* s, char* t) {

}

```

### Go Solution:

```

// Problem: One Edit Distance
// Difficulty: Medium
// 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 isOneEditDistance(s string, t string) bool {

}

```

### Kotlin Solution:

```

class Solution {
    fun isOneEditDistance(s: String, t: String): Boolean {
        }
    }
}
```

### Swift Solution:

```

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

```
}
```

### Rust Solution:

```
// Problem: One Edit Distance
// Difficulty: Medium
// 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 is_one_edit_distance(s: String, t: String) -> bool {
        ...
    }
}
```

### Ruby Solution:

```
# @param {String} s
# @param {String} t
# @return {Boolean}
def is_one_edit_distance(s, t)

end
```

### PHP Solution:

```
class Solution {

    /**
     * @param String $s
     * @param String $t
     * @return Boolean
     */
    function isOneEditDistance($s, $t) {

    }
}
```

### Dart Solution:

```
class Solution {  
    bool isOneEditDistance(String s, String t) {  
  
    }  
}
```

### Scala Solution:

```
object Solution {  
    def isOneEditDistance(s: String, t: String): Boolean = {  
  
    }  
}
```

### Elixir Solution:

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

### Erlang Solution:

```
-spec is_one_edit_distance(S :: unicode:unicode_binary(), T ::  
    unicode:unicode_binary()) -> boolean().  
is_one_edit_distance(S, T) ->  
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```

### Racket Solution:

```
(define/contract (is-one-edit-distance s t)  
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