

# Problem 771: Jewels and Stones

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 0.00%

**Paid Only:** No

## Problem Description

You're given strings

`jewels`

representing the types of stones that are jewels, and

`stones`

representing the stones you have. Each character in

`stones`

is a type of stone you have. You want to know how many of the stones you have are also jewels.

Letters are case sensitive, so

`"a"`

is considered a different type of stone from

`"A"`

.

Example 1:

Input:

jewels = "aA", stones = "aAAbbbb"

Output:

3

Example 2:

Input:

jewels = "z", stones = "ZZ"

Output:

0

Constraints:

$1 \leq \text{jewels.length}, \text{stones.length} \leq 50$

jewels

and

stones

consist of only English letters.

All the characters of

jewels

are

unique

## Code Snippets

### C++:

```
class Solution {
public:
    int numJewelsInStones(string jewels, string stones) {

    }
};
```

### Java:

```
class Solution {
    public int numJewelsInStones(String jewels, String stones) {

    }
}
```

### Python3:

```
class Solution:
    def numJewelsInStones(self, jewels: str, stones: str) -> int:
```

### Python:

```
class Solution(object):
    def numJewelsInStones(self, jewels, stones):
        """
        :type jewels: str
        :type stones: str
        :rtype: int
        """
```

### JavaScript:

```
/**
 * @param {string} jewels
 * @param {string} stones
```

```
* @return {number}
*/
var numJewelsInStones = function(jewels, stones) {

};
```

### TypeScript:

```
function numJewelsInStones(jewels: string, stones: string): number {

};
```

### C#:

```
public class Solution {
    public int NumJewelsInStones(string jewels, string stones) {

    }
}
```

### C:

```
int numJewelsInStones(char* jewels, char* stones) {

}
```

### Go:

```
func numJewelsInStones(jewels string, stones string) int {

}
```

### Kotlin:

```
class Solution {
    fun numJewelsInStones(jewels: String, stones: String): Int {

    }
}
```

### Swift:

```

class Solution {
  func numJewelsInStones(_ jewels: String, _ stones: String) -> Int {

  }
}

```

## Rust:

```

impl Solution {
  pub fn num_jewels_in_stones(jewels: String, stones: String) -> i32 {

  }
}

```

## Ruby:

```

# @param {String} jewels
# @param {String} stones
# @return {Integer}
def num_jewels_in_stones(jewels, stones)

end

```

## PHP:

```

class Solution {

  /**
   * @param String $jewels
   * @param String $stones
   * @return Integer
   */
  function numJewelsInStones($jewels, $stones) {

  }
}

```

## Dart:

```

class Solution {
  int numJewelsInStones(String jewels, String stones) {

  }
}

```

```
}
```

### Scala:

```
object Solution {  
  def numJewelsInStones(jewels: String, stones: String): Int = {  
  
  }  
}
```

### Elixir:

```
defmodule Solution do  
  @spec num_jewels_in_stones(jewels :: String.t, stones :: String.t) :: integer  
  def num_jewels_in_stones(jewels, stones) do  
  
  end  
end
```

### Erlang:

```
-spec num_jewels_in_stones(Jewels :: unicode:unicode_binary(), Stones ::  
unicode:unicode_binary()) -> integer().  
num_jewels_in_stones(Jewels, Stones) ->  
.
```

### Racket:

```
(define/contract (num-jewels-in-stones jewels stones)  
  (-> string? string? exact-integer?)  
)
```

## Solutions

### C++ Solution:

```
/*  
 * Problem: Jewels and Stones  
 * Difficulty: Easy  
 * Tags: string, hash
```

```

*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

class Solution {
public:
    int numJewelsInStones(string jewels, string stones) {

    }
};

```

### Java Solution:

```

/**
 * Problem: Jewels and Stones
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
    public int numJewelsInStones(String jewels, String stones) {

    }
}

```

### Python3 Solution:

```

"""
Problem: Jewels and Stones
Difficulty: Easy
Tags: string, hash

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

```

```

"""

class Solution:
    def numJewelsInStones(self, jewels: str, stones: str) -> int:
        # TODO: Implement optimized solution
        pass

```

### Python Solution:

```

class Solution(object):
    def numJewelsInStones(self, jewels, stones):
        """
        :type jewels: str
        :type stones: str
        :rtype: int
        """

```

### JavaScript Solution:

```

/**
 * Problem: Jewels and Stones
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
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 */

/**
 * @param {string} jewels
 * @param {string} stones
 * @return {number}
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var numJewelsInStones = function(jewels, stones) {

};

```

### TypeScript Solution:



```

/**
 * Problem: Jewels and Stones
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
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 */

function numJewelsInStones(jewels: string, stones: string): number {

};

```

### C# Solution:

```

/*
 * Problem: Jewels and Stones
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

public class Solution {
    public int NumJewelsInStones(string jewels, string stones) {

    }
}

```

### C Solution:

```

/*
 * Problem: Jewels and Stones
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map

```

```

*/

int numJewelsInStones(char* jewels, char* stones) {

}

```

### Go Solution:

```

// Problem: Jewels and Stones
// Difficulty: Easy
// Tags: string, hash
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
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func numJewelsInStones(jewels string, stones string) int {

}

```

### Kotlin Solution:

```

class Solution {
    fun numJewelsInStones(jewels: String, stones: String): Int {

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### Swift Solution:

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class Solution {
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### Rust Solution:

```

// Problem: Jewels and Stones
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// Tags: string, hash

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```
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
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impl Solution {
    pub fn num_jewels_in_stones(jewels: String, stones: String) -> i32 {

    }
}
```

### Ruby Solution:

```
# @param {String} jewels
# @param {String} stones
# @return {Integer}
def num_jewels_in_stones(jewels, stones)

end
```

### PHP Solution:

```
class Solution {

    /**
     * @param String $jewels
     * @param String $stones
     * @return Integer
     */
    function numJewelsInStones($jewels, $stones) {

    }

}
```

### Dart Solution:

```
class Solution {
    int numJewelsInStones(String jewels, String stones) {

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}
```

### Scala Solution:

```
object Solution {  
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