

# Problem 2284: Sender With Largest Word Count

## Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

You have a chat log of

n

messages. You are given two string arrays

messages

and

senders

where

messages[i]

is a

message

sent by

senders[i]

A

message

is list of

words

that are separated by a single space with no leading or trailing spaces. The

word count

of a sender is the total number of

words

sent by the sender. Note that a sender may send more than one message.

Return

the sender with the

largest

word count

. If there is more than one sender with the largest word count, return

the one with the

lexicographically largest

name

.

Note:

Uppercase letters come before lowercase letters in lexicographical order.

"Alice"

and

"alice"

are distinct.

Example 1:

Input:

```
messages = ["Hello userTwooo", "Hi userThree", "Wonderful day Alice", "Nice day userThree"],  
senders = ["Alice", "userTwo", "userThree", "Alice"]
```

Output:

"Alice"

Explanation:

Alice sends a total of  $2 + 3 = 5$  words. userTwo sends a total of 2 words. userThree sends a total of 3 words. Since Alice has the largest word count, we return "Alice".

Example 2:

Input:

```
messages = ["How is leetcode for everyone", "Leetcode is useful for practice"], senders =  
["Bob", "Charlie"]
```

Output:

"Charlie"

Explanation:

Bob sends a total of 5 words. Charlie sends a total of 5 words. Since there is a tie for the largest word count, we return the sender with the lexicographically larger name, Charlie.

Constraints:

$n == \text{messages.length} == \text{senders.length}$

$1 \leq n \leq 10$

4

$1 \leq \text{messages}[i].length \leq 100$

$1 \leq \text{senders}[i].length \leq 10$

$\text{messages}[i]$

consists of uppercase and lowercase English letters and

' '

.

All the words in

$\text{messages}[i]$

are separated by

a single space

.

$\text{messages}[i]$

does not have leading or trailing spaces.

$\text{senders}[i]$

consists of uppercase and lowercase English letters only.

## Code Snippets

### C++:

```
class Solution {  
public:  
    string largestWordCount(vector<string>& messages, vector<string>& senders) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public String largestWordCount(String[] messages, String[] senders) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def largestWordCount(self, messages: List[str], senders: List[str]) -> str:
```

### Python:

```
class Solution(object):  
    def largestWordCount(self, messages, senders):  
        """  
        :type messages: List[str]  
        :type senders: List[str]  
        :rtype: str  
        """
```

### JavaScript:

```
/**  
 * @param {string[]} messages  
 * @param {string[]} senders  
 * @return {string}  
 */  
var largestWordCount = function(messages, senders) {
```

```
};
```

### TypeScript:

```
function largestWordCount(messages: string[], senders: string[]): string {  
};
```

### C#:

```
public class Solution {  
    public string LargestWordCount(string[] messages, string[] senders) {  
  
    }  
}
```

### C:

```
char* largestWordCount(char** messages, int messagesSize, char** senders, int  
sendersSize) {  
  
}
```

### Go:

```
func largestWordCount(messages []string, senders []string) string {  
  
}
```

### Kotlin:

```
class Solution {  
    fun largestWordCount(messages: Array<String>, senders: Array<String>): String  
    {  
  
    }  
}
```

### Swift:

```
class Solution {  
    func largestWordCount(_ messages: [String], _ senders: [String]) -> String {  
        }  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn largest_word_count(messages: Vec<String>, senders: Vec<String>) ->  
        String {  
            }  
        }  
}
```

### Ruby:

```
# @param {String[]} messages  
# @param {String[]} senders  
# @return {String}  
def largest_word_count(messages, senders)  
  
end
```

### PHP:

```
class Solution {  
  
    /**  
     * @param String[] $messages  
     * @param String[] $senders  
     * @return String  
     */  
    function largestWordCount($messages, $senders) {  
  
    }  
}
```

### Dart:

```
class Solution {  
    String largestWordCount(List<String> messages, List<String> senders) {
```

```
}
```

```
}
```

### Scala:

```
object Solution {  
    def largestWordCount(messages: Array[String], senders: Array[String]): String  
    = {  
  
    }  
}
```

### Elixir:

```
defmodule Solution do  
  @spec largest_word_count(messages :: [String.t], senders :: [String.t]) ::  
  String.t  
  def largest_word_count(messages, senders) do  
  
  end  
end
```

### Erlang:

```
-spec largest_word_count(Messages :: [unicode:unicode_binary()], Senders ::  
[unicode:unicode_binary()]) -> unicode:unicode_binary().  
largest_word_count(Messages, Senders) ->  
.
```

### Racket:

```
(define/contract (largest-word-count messages senders)  
(-> (listof string?) (listof string?) string?)  
)
```

## Solutions

### C++ Solution:

```

/*
 * Problem: Sender With Largest Word Count
 * Difficulty: Medium
 * Tags: array, string, graph, hash
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public:
    string largestWordCount(vector<string>& messages, vector<string>& senders) {
}
};


```

### Java Solution:

```

/**
 * Problem: Sender With Largest Word Count
 * Difficulty: Medium
 * Tags: array, string, graph, hash
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public String largestWordCount(String[] messages, String[] senders) {
}

}


```

### Python3 Solution:

```

"""

Problem: Sender With Largest Word Count
Difficulty: Medium
Tags: array, string, graph, hash


```

```

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map

"""

class Solution:

def largestWordCount(self, messages: List[str], senders: List[str]) -> str:
# TODO: Implement optimized solution
pass

```

### Python Solution:

```

class Solution(object):
def largestWordCount(self, messages, senders):
"""
:type messages: List[str]
:type senders: List[str]
:rtype: str
"""

```

### JavaScript Solution:

```

/**
 * Problem: Sender With Largest Word Count
 * Difficulty: Medium
 * Tags: array, string, graph, hash
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

/**
 * @param {string[]} messages
 * @param {string[]} senders
 * @return {string}
 */
var largestWordCount = function(messages, senders) {

};


```

### TypeScript Solution:

```
/**  
 * Problem: Sender With Largest Word Count  
 * Difficulty: Medium  
 * Tags: array, string, graph, hash  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(n) for hash map  
 */  
  
function largestWordCount(messages: string[], senders: string[]): string {  
}  
};
```

### C# Solution:

```
/*  
 * Problem: Sender With Largest Word Count  
 * Difficulty: Medium  
 * Tags: array, string, graph, hash  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(n) for hash map  
 */  
  
public class Solution {  
    public string LargestWordCount(string[] messages, string[] senders) {  
    }  
}
```

### C Solution:

```
/*  
 * Problem: Sender With Largest Word Count  
 * Difficulty: Medium  
 * Tags: array, string, graph, hash  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)
```

```

* Space Complexity: O(n) for hash map
*/
char* largestWordCount(char** messages, int messagesSize, char** senders, int
sendersSize) {

}

```

### Go Solution:

```

// Problem: Sender With Largest Word Count
// Difficulty: Medium
// Tags: array, string, graph, hash
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

func largestWordCount(messages []string, senders []string) string {
}

```

### Kotlin Solution:

```

class Solution {
    fun largestWordCount(messages: Array<String>, senders: Array<String>): String
}

```

### Swift Solution:

```

class Solution {
    func largestWordCount(_ messages: [String], _ senders: [String]) -> String {
}
}

```

### Rust Solution:

```

// Problem: Sender With Largest Word Count
// Difficulty: Medium
// Tags: array, string, graph, hash
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

impl Solution {
    pub fn largest_word_count(messages: Vec<String>, senders: Vec<String>) -> String {
        }

    }
}

```

### Ruby Solution:

```

# @param {String[]} messages
# @param {String[]} senders
# @return {String}
def largest_word_count(messages, senders)

end

```

### PHP Solution:

```

class Solution {

    /**
     * @param String[] $messages
     * @param String[] $senders
     * @return String
     */
    function largestWordCount($messages, $senders) {

    }
}

```

### Dart Solution:

```

class Solution {
    String largestWordCount(List<String> messages, List<String> senders) {

```

```
}
```

```
}
```

### Scala Solution:

```
object Solution {  
    def largestWordCount(messages: Array[String], senders: Array[String]): String  
    = {  
  
    }  
}
```

### Elixir Solution:

```
defmodule Solution do  
  @spec largest_word_count(messages :: [String.t], senders :: [String.t]) ::  
  String.t  
  def largest_word_count(messages, senders) do  
  
  end  
end
```

### Erlang Solution:

```
-spec largest_word_count(Messages :: [unicode:unicode_binary()], Senders ::  
[unicode:unicode_binary()]) -> unicode:unicode_binary().  
largest_word_count(Messages, Senders) ->  
.
```

### Racket Solution:

```
(define/contract (largest-word-count messages senders)  
(-> (listof string?) (listof string?) string?)  
)
```