

Problem 2553: Separate the Digits in an Array

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given an array of positive integers

nums

, return

an array

answer

that consists of the digits of each integer in

nums

after separating them in

the same order

they appear in

nums

.

To separate the digits of an integer is to get all the digits it has in the same order.

For example, for the integer

10921

, the separation of its digits is

[1,0,9,2,1]

.

Example 1:

Input:

nums = [13,25,83,77]

Output:

[1,3,2,5,8,3,7,7]

Explanation:

- The separation of 13 is [1,3]. - The separation of 25 is [2,5]. - The separation of 83 is [8,3]. - The separation of 77 is [7,7]. answer = [1,3,2,5,8,3,7,7]. Note that answer contains the separations in the same order.

Example 2:

Input:

nums = [7,1,3,9]

Output:

[7,1,3,9]

Explanation:

The separation of each integer in nums is itself. answer = [7,1,3,9].

Constraints:

$1 \leq \text{nums.length} \leq 1000$

$1 \leq \text{nums}[i] \leq 10$

5

Code Snippets

C++:

```
class Solution {
public:
vector<int> separateDigits(vector<int>& nums) {
    }
};
```

Java:

```
class Solution {
public int[] separateDigits(int[] nums) {
    }
}
```

Python3:

```
class Solution:
def separateDigits(self, nums: List[int]) -> List[int]:
```

Python:

```
class Solution(object):
def separateDigits(self, nums):
    """
:type nums: List[int]
:rtype: List[int]
    """
```

JavaScript:

```
/**  
 * @param {number[]} nums  
 * @return {number[]}   
 */  
var separateDigits = function(nums) {  
  
};
```

TypeScript:

```
function separateDigits(nums: number[]): number[] {  
  
};
```

C#:

```
public class Solution {  
    public int[] SeparateDigits(int[] nums) {  
  
    }  
}
```

C:

```
/**  
 * Note: The returned array must be malloced, assume caller calls free().  
 */  
int* separateDigits(int* nums, int numSize, int* returnSize) {  
  
}
```

Go:

```
func separateDigits(nums []int) []int {  
  
}
```

Kotlin:

```
class Solution {  
    fun separateDigits(nums: IntArray): IntArray {
```

```
}
```

```
}
```

Swift:

```
class Solution {
    func separateDigits(_ nums: [Int]) -> [Int] {
        }
    }
```

Rust:

```
impl Solution {
    pub fn separate_digits(nums: Vec<i32>) -> Vec<i32> {
        }
    }
```

Ruby:

```
# @param {Integer[]} nums
# @return {Integer[]}
def separate_digits(nums)

end
```

PHP:

```
class Solution {

    /**
     * @param Integer[] $nums
     * @return Integer[]
     */
    function separateDigits($nums) {
        }
    }
```

Dart:

```
class Solution {  
    List<int> separateDigits(List<int> nums) {  
        }  
    }  
}
```

Scala:

```
object Solution {  
    def separateDigits(nums: Array[Int]): Array[Int] = {  
        }  
    }  
}
```

Elixir:

```
defmodule Solution do  
    @spec separate_digits(nums :: [integer]) :: [integer]  
    def separate_digits(nums) do  
  
    end  
    end
```

Erlang:

```
-spec separate_digits(Nums :: [integer()]) -> [integer()].  
separate_digits(Nums) ->  
.
```

Racket:

```
(define/contract (separate-digits nums)  
  (-> (listof exact-integer?) (listof exact-integer?))  
)
```

Solutions

C++ Solution:

```
/*  
 * Problem: Separate the Digits in an Array
```

```

* Difficulty: Easy
* Tags: array
*
* 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:
vector<int> separateDigits(vector<int>& nums) {

}
};

```

Java Solution:

```

/**
 * Problem: Separate the Digits in an Array
 * Difficulty: Easy
 * Tags: array
*
* 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 int[] separateDigits(int[] nums) {

}
};

```

Python3 Solution:

```

"""
Problem: Separate the Digits in an Array
Difficulty: Easy
Tags: array

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 separateDigits(self, nums: List[int]) -> List[int]:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def separateDigits(self, nums):
        """
        :type nums: List[int]
        :rtype: List[int]
        """

```

JavaScript Solution:

```

/**
 * Problem: Separate the Digits in an Array
 * Difficulty: Easy
 * Tags: array
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

/**
 * @param {number[]} nums
 * @return {number[]}
 */
var separateDigits = function(nums) {

```

TypeScript Solution:

```

/**
 * Problem: Separate the Digits in an Array
 * Difficulty: Easy
 * Tags: array
 *
 * 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 separateDigits(nums: number[]): number[] {
}

```

C# Solution:

```

/*
 * Problem: Separate the Digits in an Array
 * Difficulty: Easy
 * Tags: array
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

public class Solution {
    public int[] SeparateDigits(int[] nums) {
        return new int[0];
    }
}

```

C Solution:

```

/*
 * Problem: Separate the Digits in an Array
 * Difficulty: Easy
 * Tags: array
 *
 * 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
 */

```

```
*/  
  
/**  
 * Note: The returned array must be malloced, assume caller calls free().  
 */  
int* separateDigits(int* nums, int numsSize, int* returnSize) {  
  
}
```

Go Solution:

```
// Problem: Separate the Digits in an Array  
// Difficulty: Easy  
// Tags: array  
//  
// 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 separateDigits(nums []int) []int {  
  
}
```

Kotlin Solution:

```
class Solution {  
    fun separateDigits(nums: IntArray): IntArray {  
          
    }  
}
```

Swift Solution:

```
class Solution {  
    func separateDigits(_ nums: [Int]) -> [Int] {  
          
    }  
}
```

Rust Solution:

```

// Problem: Separate the Digits in an Array
// Difficulty: Easy
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//
// 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 separate_digits(nums: Vec<i32>) -> Vec<i32> {
        //
    }
}

```

Ruby Solution:

```

# @param {Integer[]} nums
# @return {Integer[]}
def separate_digits(nums)

end

```

PHP Solution:

```

class Solution {

    /**
     * @param Integer[] $nums
     * @return Integer[]
     */
    function separateDigits($nums) {

    }
}

```

Dart Solution:

```

class Solution {
    List<int> separateDigits(List<int> nums) {
        //
    }
}

```

Scala Solution:

```
object Solution {  
    def separateDigits(nums: Array[Int]): Array[Int] = {  
  
    }  
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Elixir Solution:

```
defmodule Solution do  
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