

Problem 1390: Four Divisors

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given an integer array

nums

, return

the sum of divisors of the integers in that array that have exactly four divisors

. If there is no such integer in the array, return

0

.

Example 1:

Input:

nums = [21,4,7]

Output:

32

Explanation:

21 has 4 divisors: 1, 3, 7, 21
4 has 3 divisors: 1, 2, 4
7 has 2 divisors: 1, 7
The answer is the sum of divisors of 21 only.

Example 2:

Input:

nums = [21,21]

Output:

64

Example 3:

Input:

nums = [1,2,3,4,5]

Output:

0

Constraints:

$1 \leq \text{nums.length} \leq 10$

4

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

5

Code Snippets

C++:

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

Java:

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

Python3:

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

Python:

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

JavaScript:

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

TypeScript:

```
function sumFourDivisors(nums: number[]): number {
```

```
};
```

C#:

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

C:

```
int sumFourDivisors(int* nums, int numsSize) {  
  
}
```

Go:

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

Kotlin:

```
class Solution {  
    fun sumFourDivisors(nums: IntArray): Int {  
  
    }  
}
```

Swift:

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

Rust:

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

```
}
```

```
}
```

Ruby:

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

end
```

PHP:

```
class Solution {

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

    }
}
```

Dart:

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

Scala:

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

Elixir:

```

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

```

Erlang:

```

-spec sum_four_divisors(Nums :: [integer()]) -> integer().
sum_four_divisors(Nums) ->
  .

```

Racket:

```

(define/contract (sum-four-divisors nums)
  (-> (listof exact-integer?) exact-integer?))

```

Solutions

C++ Solution:

```

/*
 * Problem: Four Divisors
 * Difficulty: Medium
 * Tags: array, math
 *
 * 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 sumFourDivisors(vector<int>& nums) {
    }
} ;

```

Java Solution:

```

/**
 * Problem: Four Divisors
 * Difficulty: Medium
 * Tags: array, math
 *
 * 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 sumFourDivisors(int[] nums) {

}
}

```

Python3 Solution:

```

"""
Problem: Four Divisors
Difficulty: Medium
Tags: array, math

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

```

Python Solution:

```

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

```

JavaScript Solution:

```
/**  
 * Problem: Four Divisors  
 * Difficulty: Medium  
 * Tags: array, math  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
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 */  
  
/**  
 * @param {number[]} nums  
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var sumFourDivisors = function(nums) {  
  
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```

TypeScript Solution:

```
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 * Tags: array, math  
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 */  
  
function sumFourDivisors(nums: number[]): number {  
  
};
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C# Solution:

```
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 * Problem: Four Divisors  
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 * Tags: array, math  
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```

```

* 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 SumFourDivisors(int[] nums) {

}
}

```

C Solution:

```

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* Problem: Four Divisors
* Difficulty: Medium
* Tags: array, math
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/
int sumFourDivisors(int* nums, int numsSize) {

}

```

Go Solution:

```

// Problem: Four Divisors
// Difficulty: Medium
// Tags: array, math
//
// 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 sumFourDivisors(nums []int) int {
}

```

Kotlin Solution:

```
class Solution {  
    fun sumFourDivisors(nums: IntArray): Int {  
  
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class Solution {  
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impl Solution {  
    pub fn sum_four_divisors(nums: Vec<i32>) -> i32 {  
  
    }  
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Ruby Solution:

```
# @param {Integer[]} nums  
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end
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PHP Solution:

```
class Solution {  
  
    /**  
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     */  
    function sumFourDivisors($nums) {  
  
    }  
}
```

Dart Solution:

```
class Solution {  
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object Solution {  
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defmodule Solution do  
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```
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