

# 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
 * @return {number}
 */
var sumFourDivisors = function(nums) {

};
```

## TypeScript 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
 */

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

};
```

## 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
*/

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

}

}

```

### 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)
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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 {  
  
    }  
}
```

### Swift Solution:

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

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

### Ruby Solution:

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

### PHP Solution:

```

class Solution {

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

    }

}

```

### Dart Solution:

```

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

  }

}

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### Scala Solution:

```

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

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