

Problem 3190: Find Minimum Operations to Make All Elements Divisible by Three

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given an integer array

`nums`

. In one operation, you can add or subtract 1 from

any

element of

`nums`

.

Return the

minimum

number of operations to make all elements of

`nums`

divisible by 3.

Example 1:

Input:

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

Output:

3

Explanation:

All array elements can be made divisible by 3 using 3 operations:

Subtract 1 from 1.

Add 1 to 2.

Subtract 1 from 4.

Example 2:

Input:

```
nums = [3,6,9]
```

Output:

0

Constraints:

$1 \leq \text{nums.length} \leq 50$

$1 \leq \text{nums}[i] \leq 50$

Code Snippets

C++:

```

class Solution {
public:
    int minimumOperations(vector<int>& nums) {

    }

};

```

Java:

```

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

    }

}

```

Python3:

```

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

```

Python:

```

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

```

JavaScript:

```

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

};

```

TypeScript:

```

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

```

```
};
```

C#:

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

C:

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

Go:

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

Kotlin:

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

Swift:

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

Rust:

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

```
}  
}
```

Ruby:

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

PHP:

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

Dart:

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

Scala:

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

Elixir:

```

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

  end

end

```

Erlang:

```

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

```

Racket:

```

(define/contract (minimum-operations nums)
  (-> (listof exact-integer?) exact-integer?)
  )

```

Solutions

C++ Solution:

```

/*
 * Problem: Find Minimum Operations to Make All Elements Divisible by Three
 * Difficulty: Easy
 * 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 minimumOperations(vector<int>& nums) {

    }

};

```

Java Solution:

```

/**
 * Problem: Find Minimum Operations to Make All Elements Divisible by Three
 * Difficulty: Easy
 * 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 minimumOperations(int[] nums) {

}

}

```

Python3 Solution:

```

"""
Problem: Find Minimum Operations to Make All Elements Divisible by Three
Difficulty: Easy
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 minimumOperations(self, nums: List[int]) -> int:
# TODO: Implement optimized solution
pass

```

Python Solution:

```

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

```

JavaScript Solution:

```
/**
 * Problem: Find Minimum Operations to Make All Elements Divisible by Three
 * Difficulty: Easy
 * 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
 */

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

};
```

TypeScript Solution:

```
/**
 * Problem: Find Minimum Operations to Make All Elements Divisible by Three
 * Difficulty: Easy
 * 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 minimumOperations(nums: number[]): number {

};
```

C# Solution:

```
/*
 * Problem: Find Minimum Operations to Make All Elements Divisible by Three
 * Difficulty: Easy
 * 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 MinimumOperations(int[] nums) {

}

}

```

C Solution:

```

/*
* Problem: Find Minimum Operations to Make All Elements Divisible by Three
* Difficulty: Easy
* 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
*/

int minimumOperations(int* nums, int numsSize) {

}

```

Go Solution:

```

// Problem: Find Minimum Operations to Make All Elements Divisible by Three
// Difficulty: Easy
// 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 minimumOperations(nums []int) int {

}

```

Kotlin Solution:

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

Swift Solution:

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

Rust Solution:

```
// Problem: Find Minimum Operations to Make All Elements Divisible by Three  
// Difficulty: Easy  
// 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 minimum_operations(nums: Vec<i32>) -> i32 {  
  
    }  
}
```

Ruby Solution:

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

PHP Solution:

```

class Solution {

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

    }

}

```

Dart Solution:

```

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

  }

}

```

Scala Solution:

```

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

  }

}

```

Elixir Solution:

```

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

  end

end

```

Erlang Solution:

```

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

```

Racket Solution:

```
(define/contract (minimum-operations nums)
  (-> (listof exact-integer?) exact-integer?)
  )
```