Problem 1304: Find N Unique Integers Sum up to Zero

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Given an integer

n

, return

any

array containing

n

unique

integers such that they add up to

0

.

Example 1:

Input:

n = 5

Output:

[-7,-1,1,3,4]

Explanation:

These arrays also are accepted [-5,-1,1,2,3] , [-3,-1,2,-2,4].

Example 2:

Input:

n = 3

Output:

[-1,0,1]

Example 3:

Input:

n = 1

Output:

[0]

Constraints:

1 <= n <= 1000

Code Snippets

C++:

```
class Solution {
public:
```

```
vector<int> sumZero(int n) {

}
};
```

Java:

```
class Solution {
public int[] sumZero(int n) {

}
}
```

Python3:

```
class Solution:
def sumZero(self, n: int) -> List[int]:
```

Python:

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

JavaScript:

```
/**
* @param {number} n
* @return {number[]}
*/
var sumZero = function(n) {

};
```

TypeScript:

```
function sumZero(n: number): number[] {

};
```

C#:

```
public class Solution {
public int[] SumZero(int n) {

}
}
```

C:

```
/**
* Note: The returned array must be malloced, assume caller calls free().
*/
int* sumZero(int n, int* returnSize) {

}
```

Go:

```
func sumZero(n int) []int {

}
```

Kotlin:

```
class Solution {
fun sumZero(n: Int): IntArray {

}
}
```

Swift:

```
class Solution {
func sumZero(_ n: Int) -> [Int] {

}
}
```

Rust:

```
impl Solution {
pub fn sum_zero(n: i32) -> Vec<i32> {
```

```
}
}
```

Ruby:

```
# @param {Integer} n
# @return {Integer[]}
def sum_zero(n)

end
```

PHP:

```
class Solution {

/**
* @param Integer $n
* @return Integer[]
*/
function sumZero($n) {

}
}
```

Dart:

```
class Solution {
List<int> sumZero(int n) {

}
}
```

Scala:

```
object Solution {
def sumZero(n: Int): Array[Int] = {

}
}
```

Elixir:

```
defmodule Solution do
@spec sum_zero(n :: integer) :: [integer]
def sum_zero(n) do

end
end
```

Erlang:

```
-spec sum_zero(N :: integer()) -> [integer()].
sum_zero(N) ->
.
```

Racket:

```
(define/contract (sum-zero n)
(-> exact-integer? (listof exact-integer?))
)
```

Solutions

C++ Solution:

```
/*
* Problem: Find N Unique Integers Sum up to Zero
* 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:
vector<int> sumZero(int n) {

}
};
```

Java Solution:

```
/**
* Problem: Find N Unique Integers Sum up to Zero
* Difficulty: Easy
* Tags: array, math
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/

class Solution {
public int[] sumZero(int n) {

}
}
```

Python3 Solution:

```
"""
Problem: Find N Unique Integers Sum up to Zero
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 sumZero(self, n: int) -> List[int]:
# TODO: Implement optimized solution
pass
```

Python Solution:

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

JavaScript Solution:

```
/**
* Problem: Find N Unique Integers Sum up to Zero
* Difficulty: Easy
* Tags: array, math
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* Time Complexity: O(n) or O(n log n)
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*/

/**
* @param {number} n
* @return {number[]}
*/
var sumZero = function(n) {

};
```

TypeScript Solution:

```
/**
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* Difficulty: Easy
* Tags: array, math
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* Time Complexity: O(n) or O(n log n)
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*/

function sumZero(n: number): number[] {

};
```

C# Solution:

```
/*
* Problem: Find N Unique Integers Sum up to Zero
* Difficulty: Easy
* Tags: array, math
*
```

```
* 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[] SumZero(int n) {

}
}
```

C Solution:

```
/*
* Problem: Find N Unique Integers Sum up to Zero
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* Tags: array, math
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/**
* Note: The returned array must be malloced, assume caller calls free().
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int* sumZero(int n, int* returnSize) {

}
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Go Solution:

```
// Problem: Find N Unique Integers Sum up to Zero
// 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 sumZero(n int) []int {
```

```
}
```

Kotlin Solution:

```
class Solution {
fun sumZero(n: Int): IntArray {

}
}
```

Swift Solution:

```
class Solution {
func sumZero(_ n: Int) -> [Int] {

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```

Rust Solution:

```
// Problem: Find N Unique Integers Sum up to Zero
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impl Solution {
pub fn sum_zero(n: i32) -> Vec<i32> {

}
}
```

Ruby Solution:

```
# @param {Integer} n
# @return {Integer[]}
def sum_zero(n)
```

```
end
```

PHP Solution:

```
class Solution {

/**
* @param Integer $n
* @return Integer[]
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function sumZero($n) {

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Dart Solution:

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class Solution {
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