

Problem 1317: Convert Integer to the Sum of Two No-Zero Integers

Problem Information

Difficulty: **Easy**

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

No-Zero integer

is a positive integer that

does not contain any

0

in its decimal representation.

Given an integer

n

, return

a list of two integers

[a, b]

where

:

a

and

b

are

No-Zero integers

.

$$a + b = n$$

The test cases are generated so that there is at least one valid solution. If there are many valid solutions, you can return any of them.

Example 1:

Input:

$$n = 2$$

Output:

$$[1,1]$$

Explanation:

Let $a = 1$ and $b = 1$. Both a and b are no-zero integers, and $a + b = 2 = n$.

Example 2:

Input:

$$n = 11$$

Output:

$$[2,9]$$

Explanation:

Let $a = 2$ and $b = 9$. Both a and b are no-zero integers, and $a + b = 11 = n$. Note that there are other valid answers as $[8, 3]$ that can be accepted.

Constraints:

$2 \leq n \leq 10$

4

Code Snippets

C++:

```
class Solution {  
public:  
    vector<int> getNoZeroIntegers(int n) {  
        }  
    };
```

Java:

```
class Solution {  
public int[] getNoZeroIntegers(int n) {  
    }  
}
```

Python3:

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

Python:

```
class Solution(object):  
    def getNoZeroIntegers(self, n):  
        """
```

```
:type n: int
:rtype: List[int]
"""

```

JavaScript:

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

};


```

TypeScript:

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

};


```

C#:

```
public class Solution {
    public int[] GetNoZeroIntegers(int n) {
        }
}
```

C:

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


```

Go:

```
func getNoZeroIntegers(n int) []int {
}
```

Kotlin:

```
class Solution {  
    fun getNoZeroIntegers(n: Int): IntArray {  
  
    }  
}
```

Swift:

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

Rust:

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

Ruby:

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

PHP:

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

```
}
```

Dart:

```
class Solution {  
List<int> getNoZeroIntegers(int n) {  
  
}  
}
```

Scala:

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

Elixir:

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

Erlang:

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

Racket:

```
(define/contract (get-no-zero-integers n)  
(-> exact-integer? (listof exact-integer?)))  
)
```

Solutions

C++ Solution:

```
/*
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
public:
vector<int> getNoZeroIntegers(int n) {

}
};
```

Java Solution:

```
/**
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

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

}
}
```

Python3 Solution:

```
"""
Problem: Convert Integer to the Sum of Two No-Zero Integers
Difficulty: Easy
Tags: math
```

```

Approach: Optimized algorithm based on problem constraints
Time Complexity: O(n) to O(n^2) depending on approach
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
    def getNoZeroIntegers(self, n: int) -> List[int]:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

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

```

JavaScript Solution:

```

/**
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

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

};

```

TypeScript Solution:

```

/**
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

function getNoZeroIntegers(n: number): number[] {
}

```

C# Solution:

```

/*
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

public class Solution {
    public int[] GetNoZeroIntegers(int n) {
        return new int[2];
    }
}

```

C Solution:

```

/*
 * Problem: Convert Integer to the Sum of Two No-Zero Integers
 * Difficulty: Easy
 * Tags: math
 *
 * Approach: Optimized algorithm based on problem constraints
 * Time Complexity: O(n) to O(n^2) depending on approach
 * Space Complexity: O(1) to O(n) depending on approach
 */

```

```

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

}

```

Go Solution:

```

// Problem: Convert Integer to the Sum of Two No-Zero Integers
// Difficulty: Easy
// Tags: math
//
// Approach: Optimized algorithm based on problem constraints
// Time Complexity: O(n) to O(n^2) depending on approach
// Space Complexity: O(1) to O(n) depending on approach

func getNoZeroIntegers(n int) []int {
}

```

Kotlin Solution:

```

class Solution {
    fun getNoZeroIntegers(n: Int): IntArray {
        return intArrayOf()
    }
}

```

Swift Solution:

```

class Solution {
    func getNoZeroIntegers(_ n: Int) -> [Int] {
        return []
    }
}

```

Rust Solution:

```

// Problem: Convert Integer to the Sum of Two Non-Zero Integers
// Difficulty: Easy
// Tags: math
//
// Approach: Optimized algorithm based on problem constraints
// Time Complexity: O(n) to O(n^2) depending on approach
// Space Complexity: O(1) to O(n) depending on approach

impl Solution {
    pub fn get_no_zero_integers(n: i32) -> Vec<i32> {
        ...
    }
}

```

Ruby Solution:

```

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

end

```

PHP Solution:

```

class Solution {

    /**
     * @param Integer $n
     * @return Integer[]
     */
    function getNoZeroIntegers($n) {
        ...
    }
}

```

Dart Solution:

```

class Solution {
    List<int> getNoZeroIntegers(int n) {
        ...
    }
}

```

Scala Solution:

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

Elixir Solution:

```
defmodule Solution do  
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  def get_no_zero_integers(n) do  
  
  end  
end
```

Erlang Solution:

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-spec get_no_zero_integers(N :: integer()) -> [integer()].  
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Racket Solution:

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(define/contract (get-no-zero-integers n)  
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