

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



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:

$2 \leq n \leq 10^4$

First approach

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

    function hasZero(num) {
        return num.toString().includes("0");
    }

    for (let i = 1; i < n; i++) {
        let j = n - i;
        if (!hasZero(i) && !hasZero(j)) {
            return [i, j];
        }
    }
    return 0;
};
```

Second approach

```
var getNoZeroIntegers = function(n) {  
  function hasZero(num) {  
    while (num > 0) {  
      if (num % 10 === 0) return true;  
      num = Math.floor(num / 10);  
    }  
    return false;  
  }  
  
  for (let i = 1; i < n; i++) {  
    let j = n - i;  
    if (!hasZero(i) && !hasZero(j)) {  
      return [i, j];  
    }  
  }  
};
```

Third approach

```
var getNoZeroIntegers = function(n) {  
  function hasZero(num) {  
    while (num > 0) {  
      if (num % 10 === 0) return true;  
      num = Math.floor(num / 10);  
    }  
    return false;  
  }  
  
  let a = 1;  
  let b = n - a;  
  
  while (hasZero(a) || hasZero(b)) {  
    a++;  
    b = n - a;  
  }  
  
  return [a, b];  
};
```