

# Problem 2535: Difference Between Element Sum and Digit Sum of an Array

## Problem Information

Difficulty: Easy

Acceptance Rate: 85.22%

Paid Only: No

Tags: Array, Math

## Problem Description

You are given a positive integer array `nums``.

\* The **element sum** is the sum of all the elements in `nums``. \* The **digit sum** is the sum of all the digits (not necessarily distinct) that appear in `nums``.

Return the **absolute** difference between the **element sum** and **digit sum** of `nums``.

**Note** that the absolute difference between two integers `x`` and `y`` is defined as `|x - y|``.

**Example 1:**

**Input:** `nums = [1,15,6,3]` **Output:** 9 **Explanation:** The element sum of `nums` is  $1 + 15 + 6 + 3 = 25$ . The digit sum of `nums` is  $1 + 1 + 5 + 6 + 3 = 16$ . The absolute difference between the element sum and digit sum is  $|25 - 16| = 9$ .

**Example 2:**

**Input:** `nums = [1,2,3,4]` **Output:** 0 **Explanation:** The element sum of `nums` is  $1 + 2 + 3 + 4 = 10$ . The digit sum of `nums` is  $1 + 2 + 3 + 4 = 10$ . The absolute difference between the element sum and digit sum is  $|10 - 10| = 0$ .

**Constraints:**

```
*`1 <= nums.length <= 2000` *`1 <= nums[i] <= 2000`
```

## Code Snippets

### C++:

```
class Solution {  
public:  
    int differenceOfSum(vector<int>& nums) {  
  
    }  
};
```

### Java:

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

### Python3:

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