

# 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:
```