

# Problem 16: 3Sum Closest

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 47.56%

**Paid Only:** No

**Tags:** Array, Two Pointers, Sorting

## Problem Description

Given an integer array `nums` of length `n` and an integer `target`, find three integers in `nums` such that the sum is closest to `target`.

Return `the sum of the three integers`.

You may assume that each input would have exactly one solution.

**Example 1:**

**Input:** `nums = [-1,2,1,-4], target = 1` **Output:** `2` **Explanation:** The sum that is closest to the target is 2.  $(-1 + 2 + 1 = 2)$ .

**Example 2:**

**Input:** `nums = [0,0,0], target = 1` **Output:** `0` **Explanation:** The sum that is closest to the target is 0.  $(0 + 0 + 0 = 0)$ .

**Constraints:**

`3 <= nums.length <= 500` `-1000 <= nums[i] <= 1000` `-104 <= target <= 104`

## Code Snippets

**C++:**

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

### Java:

```
class Solution {  
    public int threeSumClosest(int[] nums, int target) {  
  
    }  
}
```

### Python3:

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