Problem 3745: Maximize Expression of Three Elements

Problem Information

Difficulty: Easy
Acceptance Rate: 71.60%
Paid Only: No
Tags: Array, Greedy, Sorting, Enumeration

Problem Description

You are given an integer array `nums`.

Choose three elements `a`, `b`, and `c` from `nums` at **distinct** indices such that the value of the expression `a + b - c` is maximized.

Return an integer denoting the **maximum possible value** of this expression.

Example 1:

Input: nums = [1,4,2,5]

Output: 8

Explanation:

We can choose `a = 4`, `b = 5`, and `c = 1`. The expression value is `4 + 5 - 1 = 8`, which is the maximum possible.

Example 2:

Input: nums = [-2,0,5,-2,4]

Output: 11

Explanation:

We can choose `a = 5`, `b = 4`, and `c = -2`. The expression value is `5 + 4 - (-2) = 11`, which is the maximum possible.

Constraints:

* `3 <= nums.length <= 100` * `-100 <= nums[i] <= 100`

Code Snippets

C++:

```cpp
class Solution {
public:
int maximizeExpressionOfThree(vector<int>& nums) {

}
};
```

Java:

```java
class Solution {
public int maximizeExpressionOfThree(int[] nums) {

}
}
```

Python3:

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