Problem 1262: Greatest Sum Divisible by Three

Problem Information

Difficulty: Medium
Acceptance Rate: 51.15%
Paid Only: No
Tags: Array, Dynamic Programming, Greedy, Sorting

Problem Description

Given an integer array `nums`, return _the**maximum possible sum** of elements of the array such that it is divisible by three_.

Example 1:

Input: nums = [3,6,5,1,8] **Output:** 18 **Explanation:** Pick numbers 3, 6, 1 and 8 their sum is 18 (maximum sum divisible by 3).

Example 2:

Input: nums = [4] **Output:** 0 **Explanation:** Since 4 is not divisible by 3, do not pick any number.

Example 3:

Input: nums = [1,2,3,4,4] **Output:** 12 **Explanation:** Pick numbers 1, 3, 4 and 4 their sum is 12 (maximum sum divisible by 3).

Constraints:

* `1 <= nums.length <= 4 * 104` * `1 <= nums[i] <= 104`

Code Snippets

C++:

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

}
};
```

Java:

```
class Solution {
public int maxSumDivThree(int[] nums) {

}
}
```

Python3:

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