

Problem 2815: Max Pair Sum in an Array

Problem Information

Difficulty: Easy

Acceptance Rate: 59.94%

Paid Only: No

Tags: Array, Hash Table

Problem Description

You are given an integer array `nums`. You have to find the **maximum** sum of a pair of numbers from `nums` such that the **largest digit** in both numbers is equal.

For example, 2373 is made up of three distinct digits: 2, 3, and 7, where 7 is the largest among them.

Return the **maximum** sum or -1 if no such pair exists.

Example 1:

Input: nums = [112,131,411]

Output: -1

Explanation:

Each numbers largest digit in order is [2,3,4].

Example 2:

Input: nums = [2536,1613,3366,162]

Output: 5902

Explanation:

All the numbers have 6 as their largest digit, so the answer is $2536 + 3366 = 5902$.

Example 3:

Input: `nums = [51,71,17,24,42]`

Output: `88`

Explanation:

Each number's largest digit in order is `[5,7,7,4,4]`.

So we have only two possible pairs, $71 + 17 = 88$ and $24 + 42 = 66$.

Constraints:

`* `2 <= nums.length <= 100` * `1 <= nums[i] <= 104``

Code Snippets

C++:

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

Java:

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

Python3:

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