Problem 3232: Find if Digit Game Can Be Won

Problem Information

Difficulty: Easy
Acceptance Rate: 81.29%
Paid Only: No
Tags: Array, Math

Problem Description

You are given an array of **positive** integers `nums`.

Alice and Bob are playing a game. In the game, Alice can choose **either** all single-digit numbers or all double-digit numbers from `nums`, and the rest of the numbers are given to Bob. Alice wins if the sum of her numbers is **strictly greater** than the sum of Bob's numbers.

Return `true` if Alice can win this game, otherwise, return `false`.

Example 1:

Input: nums = [1,2,3,4,10]

Output: false

Explanation:

Alice cannot win by choosing either single-digit or double-digit numbers.

Example 2:

Input: nums = [1,2,3,4,5,14]

Output: true

Explanation:

Alice can win by choosing single-digit numbers which have a sum equal to 15.

Example 3:

Input: nums = [5,5,5,25]

Output: true

Explanation:

Alice can win by choosing double-digit numbers which have a sum equal to 25.

Constraints:

* `1 <= nums.length <= 100` * `1 <= nums[i] <= 99`

Code Snippets

C++:

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

}
};
```

Java:

```
class Solution {
public boolean canAliceWin(int[] nums) {

}
}
```

Python3:

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