Problem 1250: Check If It Is a Good Array

Problem Information

Difficulty: Hard
Acceptance Rate: 62.98%
Paid Only: No
Tags: Array, Math, Number Theory

Problem Description

Given an array `nums` of positive integers. Your task is to select some subset of `nums`, multiply each element by an integer and add all these numbers. The array is said to be **good **if you can obtain a sum of `1` from the array by any possible subset and multiplicand.

Return `True` if the array is **good **otherwise return `False`.

Example 1:

Input: nums = [12,5,7,23] **Output:** true **Explanation:** Pick numbers 5 and 7. 5*3 + 7*(-2) = 1

Example 2:

Input: nums = [29,6,10] **Output:** true **Explanation:** Pick numbers 29, 6 and 10. 29*1 + 6*(-3) + 10*(-1) = 1

Example 3:

Input: nums = [3,6] **Output:** false

Constraints:

* `1 <= nums.length <= 10^5` * `1 <= nums[i] <= 10^9`

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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