Problem 1798: Maximum Number of Consecutive Values You Can Make

Problem Information

Difficulty: Medium
Acceptance Rate: 63.01%
Paid Only: No
Tags: Array, Greedy, Sorting

Problem Description

You are given an integer array `coins` of length `n` which represents the `n` coins that you own. The value of the `ith` coin is `coins[i]`. You can **make** some value `x` if you can choose some of your `n` coins such that their values sum up to `x`.

Return the _maximum number of consecutive integer values that you**can** **make** with your coins **starting** from and **including** _`0`.

Note that you may have multiple coins of the same value.

Example 1:

Input: coins = [1,3] **Output:** 2 **Explanation:** You can make the following values: - 0: take [] - 1: take [1] You can make 2 consecutive integer values starting from 0.

Example 2:

Input: coins = [1,1,1,4] **Output:** 8 **Explanation:** You can make the following values: - 0: take [] - 1: take [1] - 2: take [1,1] - 3: take [1,1,1] - 4: take [4] - 5: take [4,1] - 6: take [4,1,1] - 7: take [4,1,1,1] You can make 8 consecutive integer values starting from 0.

Example 3:

Input: coins = [1,4,10,3,1] **Output:** 20

Constraints:

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

Code Snippets

C++:

```
class Solution {
public:
int getMaximumConsecutive(vector<int>& coins) {

}
};
```

Java:

```
class Solution {
public int getMaximumConsecutive(int[] coins) {

}
}
```

Python3:

```
class Solution:
def getMaximumConsecutive(self, coins: List[int]) -> int:
```