DP-S008 (E028)

Solved Challenges 0/2

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Non-Measurable Smallest Weight

ID:11122   Solved By 622 Users

A shop-keeper is having **N** integer values representing the measurement weights. He wishes to find the smallest integer value of weight that cannot be measured using these N weights. Please help the shop keeper by completing the program.

Boundary Condition(s):
1 <= N <= 1000
1 <= Each weight value <= 500

Input Format:
The first line contains N.
The second line contains the N integer values separated by a space.

Output Format:
The first line contains an integer value.

Example Input/Output 1:
Input:
4
2 4 1 10

Output:
8

Explanation:
1, **2**, **4** and **10** can be measured using the given single measurement.
3 - 1 and 2
5 - 1 and 4
6 - 2 and 4
7 - 1, 2 and 4
8 - cannot be measured and hence is printed as the output.

Example Input/Output 2:
Input:
5
1 4 2 4 3

Output:
15

Max Execution Time Limit: 100 millisecs

Ambiance

Python3 (3.x)

Reset

```python
1   N = int(input())
2   weights = list(map(int, input().strip().split()))
3
4   measurements = 1
5   weights.sort()
6   for weight in weights:
7       if(weight<=measurements):
8           measurements+=weight
9       else:
10          break
11  print(measurements)
12
```

Code did not pass the execution   — ✕

TestCase ID: 63872

Input:

```
4
2 4 1 10
```

Expected Output:

```
8
```

Your Program Output:

```
18
```

Save   Run

☐ Run with a custom test case (Input/Output)