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# Chocolates

Problem

Submissions

Leaderboard

Discussions

Submitted 3 hours ago • Score: 25.00

Status: **Accepted**

✓	Test Case #0	✓	Test Case #1	✓	Test Case #2
✓	Test Case #3	✓	Test Case #4	✓	Test Case #5
✓	Test Case #6	✓	Test Case #7	✓	Test Case #8
✓	Test Case #9	✓	Test Case #10	✓	Test Case #11
✓	Test Case #12	✓	Test Case #13		

## Submitted Code

Language: C++20

Open in editor

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 int main()
5 {
6
7     int T;
8     cin >> T;
9
10    while (T--)
11    {
12
13        int n;
14        cin >> n;
15
16        int sum = 0;
17        int ar[n];
18        for (int i = 0; i < n; i++)
19        {
20            cin >> ar[i];
21            sum += ar[i];
22        }
23
24        if (sum % 2 == 0)
25        {
26            int middle = sum / 2;
27            bool dp[n + 1][middle + 1];
28
29            dp[0][0] = true;
30
```

```
31     for (int i = 1; i <= middle; i++)
32     {
33         dp[0][i] = false;
34     }
35
36     for (int i = 1; i <= n; i++)
37     {
38         for (int j = 0; j <= middle; j++)
39         {
40             if (ar[i - 1] <= j)
41             {
42                 bool op1 = dp[i - 1][j - ar[i - 1]];
43                 bool op2 = dp[i - 1][j];
44
45                 dp[i][j] = (op1 or op2);
46             }
47
48             else
49             {
50                 dp[i][j] = dp[i - 1][j];
51             }
52         }
53     }
54
55     if (dp[n][middle])
56     {
57         cout << "YES" << endl;
58     }
59
60     else
61     {
62         cout << "NO" << endl;
63     }
64 }
65
66 else
67 {
68     cout << "NO" << endl;
69 }
70 }
71
72 return 0;
73 }
```