

PREPARE^{NEW}

CERTIFY

COMPETE

Search



1



yasinarafat2413 ▾

[All Contests](#) > [Final Exam | Introduction to Algorithms | Batch 03](#) > [Exam Marks III](#)

Exam Marks III

Problem

Submissions

Leaderboard

Discussions

Submitted 16 minutes ago • Score: 20.00

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	✓	Test Case #14
✓	Test Case #15	✓	Test Case #16	✓	Test Case #17
✓	Test Case #18	✓	Test Case #19		

Submitted Code

Language: C++20

Open in editor

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 int n,s, S;
5 int ar[1005];
6 int dp[1005][1005];
7
8 int main()
9 {
10
11     int t;
12     cin >> t;
13
14     for (int k = 0; k < t; k++)
15     {
16         cin >> n;
17         cin >> s;
18         for (int i = 0; i < n; i++)
19         {
20             cin >> ar[i];
21         }
22         S = 1000-s;
23
24         dp[0][0] = 0;
25         for (int i = 1; i <= S; i++)
26         {
27             dp[0][i] = INT_MAX - 1;
```

```
28     }
29
30     for (int i = 1; i <= n; i++)
31     {
32         for (int j = 0; j <= S; j++)
33         {
34             if (ar[i - 1] <= j)
35             {
36                 dp[i][j] = min(1 + dp[i][j - ar[i - 1]], dp[i - 1][j]);
37             }
38
39             else
40             {
41                 dp[i][j] = dp[i - 1][j];
42             }
43         }
44     }
45
46     if (dp[n][S] == INT_MAX - 1)
47     {
48         cout << -1 << endl;
49     }
50     else
51     {
52         cout << dp[n][S] << endl;
53     }
54
55     // for (int i = 0; i <= n; i++)
56     // {
57     //     for (int j = 0; j <= S; j++)
58     //     {
59     //         if (dp[i][j] == INT_MAX - 1)
60     //         {
61     //             cout << "X"
62     //                 << " ";
63     //         }
64     //         else
65     //         {
66     //             cout << dp[i][j] << " ";
67     //         }
68     //     }
69     //     cout << endl;
70     // }
71 }
72
73 return 0;
74 }
```