

All Contests > Final Exam | Introduction to Algorithms | Batch 03 > Exam Marks IV

Exam Marks IV

Problem	Submissions	Leaderboard	Discussions
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Submitted 2 hours 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	✓	Test Case #20
✓	Test Case #21	✓	Test Case #22		

Submitted Code

Language: C++20

Open in editor

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 int n, M, S;
5 int ar[1005];
6 int dp[1005][1005];
7 int limit = 1000000007;
8
9 int main()
10 {
11
12     int t;
13     cin >> t;
14
15     for (int i = 0; i < t; i++)
16     {
17         cin >> n;
18         cin >> M;
19         for (int i = 0; i < n; i++)
20         {
21             cin >> ar[i];
22         }
23
24         S = 1000 - M;
25         dp[0][0] = 1;
```

```
26     for (int i = 1; i <= S; i++)
27     {
28         dp[0][i] = 0;
29     }
30
31     for (int i = 1; i <= n; i++)
32     {
33         for (int j = 0; j <= S; j++)
34         {
35             if (ar[i - 1] <= j)
36             {
37                 dp[i][j] = ((dp[i][j - ar[i - 1]]) % limit + (dp[i - 1][j]) % limit) % limit;
38             }
39
40             else
41             {
42                 dp[i][j] = dp[i - 1][j];
43             }
44         }
45     }
46
47     cout << dp[n][S] << endl;
48 }
49
50 return 0;
51 }
```