



CHANDRU G S 2024-CSE ▾

C2

Started on	Sunday, 16 November 2025, 8:11 PM
State	Finished
Completed on	Sunday, 16 November 2025, 9:00 PM
Time taken	49 mins 5 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00

Problem statement:

Find the length of the Longest Non-decreasing Subsequence in a given Sequence.

Eg:

Input:9

Sequence:[-1,3,4,5,2,2,2,3]

the subsequence is [-1,2,2,2,3]

Output:6

Answer: (penalty regime: 0 %)

```
1  #include <stdio.h>
2
3  int main() {
4      int n;
5      scanf("%d", &n);
6
7      int a[n], dp[n];
8      for (int i = 0; i < n; i++) {
9          scanf("%d", &a[i]);
10         dp[i] = 1;
11     }
12
13     for (int i = 1; i < n; i++)
14         for (int j = 0; j < i; j++)
15             if (a[i] >= a[j] && dp[i] < dp[j] + 1)
16                 dp[i] = dp[j] + 1;
17
18     int ans = 0;
19     for (int i = 0; i < n; i++)
20         if (dp[i] > ans) ans = dp[i];
21
22     printf("%d", ans);
23     return 0;
24 }
25
```

	Input	Expected	Got	
✓	9 -1 3 4 5 2 2 2 3	6	6	✓
✓	7 1 2 2 4 5 7 6	6	6	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Back to Course

