Longest non-decreasing Subsequence

Problem statement:

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

Eg:

Input:9

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

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

Output:6

```c
#include <stdio.h>

int max(int a, int b) {
    return (a > b) ? a : b;
}

int main() {
    int n;
    scanf("%d", &n);

    int seq[n];
    for (int i = 0; i < n; i++) {
        scanf("%d", &seq[i]);
    }

    int dp[n];
    for (int i = 0; i < n; i++) {
        dp[i] = 1;
    }


    for (int i = 1; i < n; i++) {
        for (int j = 0; j < i; j++) {
            if (seq[i] >= seq[j]) {
                dp[i] = max(dp[i], dp[j] + 1);
            }
        }
    }


    int maxLength = 0;
    for (int i = 0; i < n; i++) {
        if (dp[i] > maxLength) maxLength = dp[i];
    }

    printf("%d\n", maxLength);

    printf("%d\n", maxLength);

    return 0;
}
```

	Input	Expected	Got	
✔	9 -1 3 4 5 2 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.