# C++ Fundamentals: Judge Assignment 3 (JA3)

The following tasks should be submitted to the SoftUni Judge system, which will be open starting **Saturday, 7 July 2018, 10:00** (in the morning) and will close on **Saturday, 14 July 2018, 20:00**. Submit your solutions here: <https://judge.softuni.bg/Contests/Compete/Index/1102>.

After the system closes, you will be able to “Practice” on the tasks – however the “Practice” results are NOT considered in the homework evaluation.

Please be mindful of the strict input and output requirements for each task, as well as any additional requirements on running time, used memory, etc., as the tasks are evaluated automatically and not following the requirements strictly may result in your program’s output being evaluated as incorrect, even if the program’s logic is mostly correct.

You can use C++03 and C++11 features in your code.

Unless explicitly stated, any integer input fits into int and any floating-point input can be stored in double.

NOTE: the tasks here are NOT ordered by difficulty level.

## Task 1 – Sequence (JA3-Task-1-Sequence)

You are given a sequence of integer numbers.

Find the length of the longest subsequence of increasing numbers in the sequence

### Input

The first line of the standard input will contain a single positive integer number N – the number of integers.

The second line of the standard input will contain exactly N integer values, separated by single spaces – the values.

### Output

A single line, representing the length of the longest subsequence of increasing values.

### Restrictions

0 < N <= 1000;

The total running time of your program should be no more than 0.1s

The total memory allowed for use by your program is 16MB

### Example I/O

|  |  |
| --- | --- |
| Example Input | Expected Output |
| 13  25 7 9 11 13 15 17 21 23 27 3 5 19 | 9 |