Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02_SCAN-PRINT
- PRACTICE-03_TYPES
- LAB-PRAC-02_SCAN-PRINT
- LAB-PRAC-01
- PRACTICE-04_COND
- BONUS-PRAC-02
- LAB-PRAC-03_TYPES
- PRACTICE-05_COND-LOOPS
- LAB-PRAC-04_COND
- LAB-PRAC-05_CONDLOOPS
- PRACTICE-07_LOOPS-ARR
- LAB-PRAC-06_LOOPS
- LAB-PRAC-07_LOOPS-ARR
  - Home Alone
  - Arrangements with Arrays
  - Overlapping Patterns
  - Lucky Draw
  - Diamond Array
  - Linear Leap
  - Candy Crush
  - Nested Safes
  - Heros Arc
  - Linear Loopy Maze
  - Histogram Heights
  - Changing Times
- LABEXAM-PRAC-01_MIDSEM
- PRACTICE-09_PTR-MAT
- LAB-PRAC-08_ARR-STR
- PRACTICE-10_MAT-FUN
- LAB-PRAC-09_PTR-MAT
- LAB-PRAC-10_MAT-FUN
- PRACTICE-11_FUN-PTR
- LAB-PRAC-11_FUN-PTR
- LAB-PRAC-12_FUN-STRUC
- LABEXAM-PRAC-02_ENDSEM
- LAB-PRAC-13_STRUC-NUM
- LAB-PRAC-14_SORT-MISC

Histogram Heights

LAB-PRAC-07_LOOPS-ARR

Histogram Heights [20 marks]

Problem Statement
In the first line of the input, you will be given a **strictly positive integer** n that is less than or equal to 20. In the next line you will be give n **non-negative integers** all separated by a space. You have to draw a histogram using the character O (capital O) and spaces as shown below. The histogram will have n bars and their heights will be dictated by the n integers given to you.

Caution

1. There is no extra space at the end of every line, nor are there extra lines.
2. Be very careful, even though the evaluation may give you marks for extra spaces and newlines, the autograder will give you zero marks for any extra spaces or new lines.

HINT: You will require the use of arrays in this question.

EXAMPLE:
INPUT
4
1 3 5 2

OUTPUT:
```
   O
   O
 O O
 O O O
O O O O
```
Explanation: There are 4 vertical bars since there are 4 elements in the list. There is a single space between two of the bars. There are no trailing spaces at the end of any of the lines nor are there extra lines at the end of the input.

Grading Scheme:
Total marks: **[20 Points]**

There will be partial grading in this question. Printing each line correctly, in the correct order, carries some weightage. All lines have equal weightage i.e. if there are 4 lines in the expected output, each is worth 25% weightage. If there are 5 lines in the expected output, each is worth 20% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

Start Solving! (/editor/practice/6147)