

CS240, Fall 2021 – HW2
Due: midnight Oct 14, 2021

Instructions

1. Submit your code to the contest website (the link is on the class website)
2. Your submission will be automatically graded.
3. You can submit unlimited times and the highest grade among all submissions will be taken.
4. The input and output of your code must be stdin and stdout, respectively. The system's judge test consists of 10 pairs of input/output files. Your program will be tested with our input and the judge test will compare your output with our output. If they match for each test case, you earn 10 points. If they match for all 10 cases, you earn 100 points.
5. You should test your code locally and make sure it builds correctly before submitting.

Problem Description

Input: two integer arrays, a and b, sorted in non-decreasing order and two nonnegative integer numbers n and m representing the numbers of elements in the two arrays a and b, respectively. n and m are less than 1000. The input has the following format:

- + line 1 contains n and m, separated by a space
- + line 2 consists of elements in the array a, each separated by a comma.
- + line 3 includes elements in the array b, each separated by a comma.

Output: merge a and b into one array, c, sorted in non-decreasing order. The output is the array c with element separated by a comma.

Requirement: you must use at least one pointer in your code

Examples:

Input1

2 3
1, 3
2, 4, 6

Output1:

1, 2, 3, 4, 6

Input2

2 3
1, 3, 5, 7
2, 4, 6

Output2:

1, 2, 3, 4, 6

Input3

2 0
1, 3

Output3:

1, 3

Input4

0 0

Output4:

Input5

2 3
1, 1
2, 2, 3

Output5:

1, 1, 2, 2, 3