

GE23131-Programming Using C-2024

Quiz navigation

1

2

3

4

Show one page at a time

Finish review

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Monday, 16 December 2024, 7:47 PM
Duration	6 days 21 hours

Question 1

Correct

Marked out of 1.00

☐ Flag question

Coders here is a simple task for you, you have given an array of size **N** and an integer **M**.

Your task is to calculate the **difference between maximum sum and minimum sum of N-M** array.

Constraints:

- $1 \leq t \leq 10$
- $1 \leq n \leq 1000$
- $1 \leq a[i] \leq 1000$

Input:

First line contains an integer **T** denoting the number of testcases.
First line of every testcase contains two integer **N** and **M**.
Next line contains **N** space separated integers denoting the elements of array

Output:

For every test case print your answer in new line

SAMPLE INPUT

1
5 1
1 2 3 4 5

SAMPLE OUTPUT

4

Explanation

M is 1 and N is 5 so you have to calculate maximum and minimum sum using (5-1 =) 4 elements.
Maximum sum using the 4 elements would be (2+3+4+5)=14.
Minimum sum using the 4 elements would be (1+2+3+4)=10.
Difference will be 14-10=4.

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
	1	4	4	
	5 1			
	1 2 3 4 5			

Passed all tests!

Question **2**

Correct

Marked out of 1.00

☐ Flag question

A new deadly virus has infected large population of a planet. A brilliant scientist has discovered a vaccine which can cure this disease. Vaccine produced from this virus has various strength depending on the strength of the person is cured only if midichlorians count in vaccine batch is more than midichlorians count of the person. A new set of report which contains midichlorians count of each infected patient, Practo stores their midichlorians count. You need to determine if doctor can save all patients with the vaccine. Print 'Yes' if vaccines and patients are equal.

Input Format

First line contains the number of vaccines - N. Second line contains N integers, which are strength of vaccines. Third line contains N integers, which are midichlorians count of patients.

Output Format

Print a single line containing 'Yes' or 'No'.

Input Constraint

$1 < N < 10$

Strength of vaccines and midichlorians count of patients fit in integer.

SAMPLE INPUT

5
123 146 454 542 456
100 328 248 689 200

SAMPLE OUTPUT

No

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
	5	No	No	
	123 146 454 542 456			
	100 328 248 689 200			

Passed all tests!

Question **3**

Correct

Marked out of 1.00

☐ Flag question

You are given an array of n integer numbers a_1, a_2, \dots, a_n . Calculate the number of pair of indices i, j such that $i < j$ and $a_i \text{ xor } a_j = 0$.

Input format

- First line: n denoting the number of array elements
- Second line: n space separated integers a_1, a_2, \dots, a_n .

Output format

Output the required number of pairs.

Constraints

$$1 \leq n \leq 10^6$$

$$1 \leq a_i \leq 10^9$$

SAMPLE INPUT

5
1 3 1 4 3

SAMPLE OUTPUT

2

Explanation

The 2 pair of indices are **(1, 3)** and **(2,5)**.

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
	5 1 3 1 4 3	2	2	

Passed all tests!

Question **4**

Correct

Marked out of 1.00

☐ Flag question

You are given an array **A** of non-negative integers of size **m**. Your task is to sort the array in n print out the original indices of the new sorted array.

Example:

A={4,5,3,7,1}

After sorting the new array becomes A={1,3,4,5,7}.

The required output should be "4 2 0 1 3"

INPUT :

The first line of input consists of the size of the array
The next line consists of the array of size m

OUTPUT :

Output consists of a single line of integers

CONSTRAINTS:

1<=m<=106

0<=A[i]<=106

NOTE: The indexing of the array starts with 0.

SAMPLE INPUT

5
4 5 3 7 1

SAMPLE OUTPUT

4 2 0 1 3

	Input	Expected	Got	
	5 4 5 3 7 1	4 2 0 1 3	4 2 0 1 3	

Passed all tests!

Save the state of the flags