

REC-CIS

GE23131-Programming Using C-2024

Quiz navigation


[Show one page at a time](#)
[Finish review](#)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 19 December 2024, 11:11 PM
Duration	3 days 18 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**

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 %)

```
1 #include<stdio.h>
2
3 int main(){
4     int t;
5     scanf("%d",&t);
```

REC-CIS

```

9      d=n-m;
10     int arr[n];
11     for(int i=0;i<n;i++)
12         scanf("%d",&arr[i]);
13     for(int j=0;j<n;j++){
14         min=j;
15         for(int k=j;k<n;k++){
16             if(arr[k]<arr[min])
17                 min=k;
18         }
19         temp=arr[min];
20         arr[min]=arr[j];
21         arr[j]=temp;
22     }
23     int maxsum=0,minsum=0;
24     for(int a=0;a<d;a++)
25         minsum+=arr[a];
26     for(int b=n-1;b>m-1;b--)
27         maxsum+=arr[b];
28     printf("%d\n",maxsum-minsum);
29 }
30 }

```

	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 disease. Vaccine produced from this virus has various strength depending on midichlorians count in vaccine batch is more than midichlorians count of person. A doctor receives a new set of each infected patient, Practo stores all vaccine doctor has and their midichlorians count. You have to check if the strength of vaccine is more than the midichlorians count of patients. If yes, print 'Yes' otherwise print 'No'. The number of vaccines and patients are equal.

Input Format

First line contains the number of vaccines - N. Second line contains N integers, which are strengths 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

REC-CIS

Answer: (penalty regime: 0 %)

```

1  #include<stdio.h>
2
3  int main()
4  {
5      int n,min1,min2,temp,flag=1;
6      scanf("%d", &n);
7      int vac[n],pat[n];
8      for(int i=0;i<n;i++)
9          scanf("%d",&vac[i]);
10     for(int i=0;i<n;i++)
11         scanf("%d",&pat[i]);
12
13     for(int j=0;j<n-1;j++){
14         min1=j,min2=j;
15         for(int k=j;k<n;k++){
16             if(vac[k]<vac[min1])
17                 min1=k;
18             if(pat[k]<pat[min2])
19                 min2=k;
20         }
21         temp=vac[min1];
22         vac[min1]=vac[j];
23         vac[j]=temp;
24
25         temp=pat[min2];
26         pat[min2]=pat[j];
27         pat[j]=temp;
28     }
29     for(int i=0;i<n;i++){
30         if(vac[i]<=pat[i]){
31             flag=0;
32             break;
33         }
34     }
35     if(flag==1)
36         printf("Yes");
37     else
38         printf("No");
39 }

```

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

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 i and j such that $a_i \text{ xor } a_j = 0$.

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

REC-CIS

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 %)

```

1  #include<stdio.h>
2
3  int main(){
4      int n,count=0;
5      scanf("%d",&n);
6      int arr[n];
7      for(int i=0;i<n;i++){
8          scanf("%d",&arr[i]);
9      }
10     for(int i=0;i<n-1;i++){
11         for(int j=i+1;j<n;j++){
12             if((arr[i]^arr[j])==0)
13                 count++;
14         }
15     }
16     printf("%d", count);
17 }
```

	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** indices of the new sorted array.

Example:

REC-CIS

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:

$$1 \leq m \leq 106$$

$$0 \leq A[i] \leq 106$$

NOTE: The indexing of the array starts with 0.

SAMPLE INPUT

5
4 5 3 7 1

SAMPLE OUTPUT

4 2 0 1 3

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2
3 int main(){
4     int n;
5     scanf("%d", &n);
6     int arr[n];
7     for(int i=0;i<n;i++)
8         scanf("%d",&arr[i]);
9     int max=arr[0];
10    for(int i=1;i<n;i++)
11    {
12        if(arr[i]>max)
13            max=arr[i];
14    }
15    max++;
16    int min=0;
17    for(int a=0;a<n;a++){
18        for(int b=0;b<n;b++){
19            if(arr[b]<arr[min])
20                min=b;
21        }
22        printf("%d ",min);
23        arr[min]=max;
24    }
25 }
```

REC-CIS

	5	4 2 0 1 3	4 2 0 1 3	
	4 5 3 7 1			

Passed all tests!