Week 8

Roll No: 241701017

Name: Harini M

WEEK 08

```
Question 1
                     Coders here is a simple task for you, you have given an array of size {\it N} and an integer {\it M}.
Correct
Marked out of
1.00
                     Your task is to calculate the difference between maximum sum and minimum sum of N-M elements of the given array.
₹ Flag question
                     Constraints:
                     1<=t<=10
                     1<=n<=1000
                     1<=a/il<=1000
                     Input:
                     First line contains an integer T denoting the number of testcases.
                     First line of every testcase contains two integer {\it N} and {\it M}.
                     Next line contains N space separated integers denoting the elements of array
                     For every test case print your answer in new line
                     SAMPLE INPUT
                     5 1
                     12345
                     SAMPLE OUTPUT
```

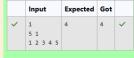
```
Explanation

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.
```



Passed all tests! 🗸

Question 2
Correct
Marked out of 1.00
F Flag question

A new deadly virus has infected large population of a planet. A brilliant scientist has discovered a new strain of virus which can cure this disease. Vaccine produced from this virus has various strength depending on midichlorians count. A doctor receives a new set of report which contains midichlorians count of each infected patient. Practo stores all vaccine doctor has and their midichlorians count. You need to determine if doctor can save all patients with the vaccines he has. 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 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

```
#include<stdio.h>
int main()
2
3 4
5
6
7
8
9
                      int n,min1,min2,temp,flag=1;
                    int n,man1,man2,temp,fl
scanf("%d",%n);
int vac(n),pat(n);
for(int i=0;i<n;i++)
scanf("%d",&vac(i]);
for(int i=0;i<n;i+)
scanf("%d",&pat[i]);
for(int j=0;j<n-1;j++)
{</pre>
 11
12
13
14
15
                              min1=j,min2=j;
for(int k=j;k<n;k++)
                                        if(pat[k]<pat[min2])
min2=k;</pre>
16
17
18
                              }
temp=vac[min1];
vac[min1]=vac[j];
vac[j]=temp;
temp=vac[min2];
pat[min2]=pat[j];
pat[j]=temp;
19
20
21
22
23
24
25
26
27
28
29
30
31
                     for(int i=0;i<n;i++)
                               if(vac[i]<=pat[i])</pre>
                                         flag=0;
                                        break;
32
33
34
35
36
37
38
39
                     if(flag==1)
printf("yes");
                     else
printf("No");
```

Passed all tests! 🗸

Question 3 Correct Marked out of

```
You are given an array of n integer numbers a_1, a_2, \ldots, a_n. Calculate the number of pair of indices (i, j) such that 1 \le i < j \le n and a_i xor a_j = 0.
                      Input format
₹ Flag question
                      - First line: {\it n} denoting the number of array elements
                      - Second line: n space separated integers a_1, a_2, \ldots, a_n
                      Output format
                      Output the required number of pairs.
                      Constraints
                      1 \le n \le 10^6
                      1 \leq a_i \leq 10^9
                      SAMPLE INPUT
                      13143
                      SAMPLE OUTPUT
```

2

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

```
int n,count=0;
scanf("%d",&n);
int arr[n];
for(int i=0;i<n;i++)
scanf("%d",&arr[i]);
for(int i=0;i<n-1;i++);</pre>
                      {
    for(int j=i+1;j<n;j++)
    {
        if((arr[i]^arr[j])==0)
        count++;
    }
}</pre>
                     printf("%d",count);
```

Question 4
Correct
Marked out of 1.00
F Flag question

You are given an array A of non-negative integers of size m. Your task is to sort the array in non-decreasing order and 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"

INDUIT :

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

45371

SAMPLE OUTPUT

42013

Answer: (penalty regime: 0 %)

Passed all tests! 🗸