

## WEEK 8

### 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 int main(){
3     int t;
4     scanf("%d",&t);
5     while(t--){
6         int n,m,d,min,temp;
7         scanf("%d %d",&n,&m);
8         d=n-m;
9         int arr[n];
10        for(int i=0;i<n;i++){
11            scanf("%d",&arr[i]);
12        }
13        for(int j=0;j<n-1;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        }
27        for(int b=n-1;b>m-1;b--){
28            maxsum+=arr[b];
29        }
30        printf("%d\n",(maxsum-minsum));
31    }
```

|   | Input                 | Expected | Got |   |
|---|-----------------------|----------|-----|---|
| ✓ | 1<br>5 1<br>1 2 3 4 5 | 4        | 4   | ✓ |



5

123 146 454 542 456

100 328 248 689 200

### SAMPLE OUTPUT

No

**Answer:** (penalty regime: 0 %)

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

|   | Input                    | Expected | Got |   |
|---|--------------------------|----------|-----|---|
| ✓ | 5<br>123 146 454 542 456 | No       | No  | ✓ |

### 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 int main(){
3     int n,count=0;
4     scanf("%d",&n);
5     int arr[n];
6     for(int i=0;i<n;i++)
7         scanf("%d",&arr[i]);
8     for(int i=0;i<n-1;i++){
9         for(int j=i+1;j<n;j++){
10             if((arr[i]^arr[j])==0)
11                 count++;}}
12     printf("%d",count);}
```

|   | Input          | Expected | Got |   |
|---|----------------|----------|-----|---|
| ✓ | 5<br>1 3 1 4 3 | 2        | 2   | ✓ |

$1 \leq m \leq 106$

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

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

|   | Input          | Expected  | Got       |   |
|---|----------------|-----------|-----------|---|
| ✓ | 5<br>4 5 3 7 1 | 4 2 0 1 3 | 4 2 0 1 3 | ✓ |