



Find Maximum and Minimum elements

locked

Problem

Submissions

Leaderboard

Discussions

Find Maximum and Minimum elements alternatively based on K value. For Example, If array elements are 3 2 1 6 5 7 8 13 and K is 3. Always Initially find maximum element, then Minimum element and it goes on.

Step 1: Maximum Element of K range: 3 2 1 -> 3.

Step 2: Minimum Element of next K range: 6 5 7 -> 5.

Step 3: Maximum Element of next K range: 8 13 -> 13.

Output: 3 5 13.

Note: Array Elements aren't sorted. In last step, find the Min/Max to the remaining elements eventhough number of remaining elements in the array is lesser than K(Step 3). . K value can be greater than N value($K > N$)

Input Format

N -> Integer

array[i] -> Integer

K -> Integer

Constraints

$1 \leq N \leq 10000$

$-10000 \leq \text{array}[i] \leq 10000$

$1 \leq k \leq 100000$

Output Format

Print the desired output

Sample Input 0

```
5
4 3 5 2 8
2
```

Sample Output 0

```
4 2 8
```

Sample Input 1

```
8
6 4 2 90 1 7 5 8
```

Sample Output 1

90 1

[f](#) [t](#) [in](#)

Submissions: 10

Max Score: 100

Difficulty: Medium

Rate This Challenge:

☆☆☆☆☆

[More](#)

C



```
1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>
4 #include <stdlib.h>
5
6 int min_arr(int arr[],int start,int stop)
7 {
8     int i,min=100000;
9     for(i=start;i<stop;i++)
10     {
11         if(min>arr[i])
12             min=arr[i];
13     }
14     return min;
15 }
16
17 int max_arr(int arr[],int start,int stop)
18 {
19     int i,max=-100000;
20     for(i=start;i<stop;i++)
21     {
22         if(max<arr[i])
23             max=arr[i];
24     }
25     return max;
26 }
27
28 int main() {
29
30     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
31     int n,i,turn=0,k,start,stop;
32     scanf("%d",&n);
33     int arr[n];
34     for(i=0;i<n;i++)
35     {
36         scanf("%d",&arr[i]);
37     }
38     scanf("%d",&k);
39
40     for(i=0;i<n;i=i+k)
41     {
42         start=i;
43         if(i+k > n-1 )
44             stop=n;
45         else
46             stop=i+k;
47         if(turn==0)
48         {
49             printf("%d ",max_arr(arr,start,stop));
50             turn=1;
51         }
```

```
52         else
53     {
54         printf("%d ",min_arr(arr,start,stop));
55         turn=0;
56     }
57 }
58
59
60 return 0;
61 }
62
```

Line: 1 Col: 1

[Upload Code as File](#)

Test against custom input

Run Code

Submit Code

[Contest Calendar](#) | [Interview Prep](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)