

<https://course.acciojob.com/idle?question=432f7ce4-a080-40bc-a2da-b7b2bbea21a0>

● EASY

● Max Score: 30 Points

●

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AS Kth Smallest & Largest

Write a program to print the Kth smallest and Kth largest element of array `arr` of size `N`.

Find the Kth smallest and Kth largest number from the unsorted array.

It is given that all elements of array are distinct

Input Format

The first line contains an integer 'N' denoting the number of elements.

The Second line contains 'N' space separated integers denoting the elements of the array.

The Third line contains an integer 'K'.

Output Format

In line 1, print the Kth smallest element of array.

In line 2, print the Kth largest element of array.

Example 1

Input

```
6
7 10 4 3 20 15
4
```

Output

10
7

Explanation

10 is the 4th smallest element, and 7 is the 4th largest element.

Example 2

Input

5
11 5 12 6 13
2

Output

6
12

Explanation

6 is the 2nd smallest element, and 12 is the 2nd largest element

Constraints

$1 \leq \text{nums.length} \leq 10^5$

$-10^9 \leq \text{nums}[i] \leq 10^9$

$1 \leq k \leq \text{nums.length}$

Topic Tags

- Heaps
- Sorting

- Arrays

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.* ;
class Solution{
    public static void kSmallLarge( int arr [], int n, int k){
        //Write your code and print here
        Arrays.sort(arr);
        System.out.println(arr[k-1]);
        System.out.println(arr[n-k]);
    }
}

public class Main{
    public static void main(String args[]){

        int n;
        Scanner sc = new Scanner(System.in);
        n = sc.nextInt();
        int arr[]=new int[n];
        for(int i=0; i<n; i++){
            arr[i]=sc.nextInt();
        }

        int k;
        k=sc.nextInt();

        Solution obj= new Solution();
```

```
obj.kSmallLarge(arr,n, k);
```

```
}
```

```
}
```