

<https://course.acciojob.com/idle?question=8b43d38c-db76-46f1-a2b9-60ec18dab539>

● MEDIUM

● Max Score: 50 Points

●

K largest elements

Given an array of N positive integers, print K largest elements from the array.

Input

- The first line contains an integer N and integer K.
- The second line contains N spaced integers, the elements of the array.

Constraints

- $1 \leq N \leq 10^4$
- $K \leq N$
- $1 \leq \text{arr}[i] \leq 10^6$

Output

Print the K largest elements in descending order.

Expected Time Complexity: $O(N \log K)$

Expected Auxiliary Space: $O(K)$

Example

Sample Input

```
5 2
12 5 787 1 23
```

Sample Output

```
787 23
```

Explanation

First largest element in the array is 787 and the second largest is 23.

Sample Input

```
7 3
1 23 12 9 30 2 50
```

Sample Output

```
50 30 23
```

Explanation

Three Largest element in the array are 50, 30 and 23.

Topic Tags

- **Heaps**

My code

```
// n java
```

```
import java.util.*;
import java.io.*;
```

```
public class Main {
    public static void main(String args[]) {
        //your code here
    }
}
```

```
Scanner s=new Scanner(System.in);
int n=s.nextInt();
int m=s.nextInt();
int arr[]=new int[n];
for(int i=0;i<n;i++)
    arr[i]=s.nextInt();
Arrays.sort(arr);
for(int i=0;i<m;i++)
    System.out.print(arr[n-1-i]+" ");
    }
}
```