https://course.acciojob.com/idle?question=e91d4630-173f-443e-96d1-82c474a8a3a2

- HARD
- Max Score: 50 Points

K-th element of two sorted Arrays

Given two sorted arrays `arr1` and `arr2` of size `N` and `M` respectively and an element `K`, the task is to find the element that would be at the kth position of the final sorted array.

Input Format

- **First line of input contains two integers `N` and `M`.**
- **Second line contains `N` spaced integers elements of `arr1`.**
- **Third line contains `M` spaced integers elements of `arr2`.**
- **Last line contains the integer `K`.**

Output Format

Print the element that occurs at the kth position in the sorted array of the combination of `arr1` and `arr2`.

Example 1

Input

```
5 4
2 3 6 7 9
1 4 8 10
5
```

Output

```
6
```

Explanation The final sorted array would be -

```
1, 2, 3, 4, 6, 7, 8, 9, 10
```

The element at the 5th position is `6`.

Example 2

Input

```
2 1
0 2
1
2
```

Output

```
1
```

Explanation The final sorted array would be -

```
0, 1, 2
```

The element at the 2nd position is `1`.

Constraints

- **1 <= `N, M` <= 10^6**
- **1 <= `arr1[i], arr2[i]` < INT_MAX**
- **1 <= `K` <= `N+M`**

Topic Tags

- **Arrays**

My code

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

```
public class Main
{
	public static void main (String[] args) throws java.lang.Exception
	{
		//your code here
	   Scanner s=new Scanner(System.in);
	   int n=s.nextInt();
	   int m=s.nextInt();
		int arr[]=new int [n];
	   int arb[]=new int [m];
	  for(int i=0;i<n;i++)
	   arr[i]=s.nextInt();
	     for(int i=0;i<m;i++)
	   arb[i]=s.nextInt();
	  int t=s.nextInt();
	  int ar[]=new int [m+n];
	   for(int i=0;i<n;i++)
		ar[i]=arr[i];
	    for(int i=n;i<n+m;i++)
		ar[i]=arb[i-n];
	   Arrays.sort(ar);
	   System.out.print(ar[t-1]);
    }
}
```