

## K. Sort range

time limit per test: 1 second

memory limit per test: 256 megabytes

Omani and Mubarak were bored during their trip to Alexandria. So they decided to play a game. The game is that Mubarak gives Omani  $N$  numbers and Omani has to sort the array as follows sort range  $[1,1+m]$  then  $[2,m+2]$  then  $[3,m+3]$  , ....  $[n-m,n]$ . Then Mubarak will ask smar to find number in postion K. Smar can't find the number. Can you find this number and help smar?

### Input

The first line contains an integer  $T$  ( $1 \leq T \leq 100$ ) specifying the number of test cases.

The second line contains a single integer  $N$  ( $1 \leq M \leq K \leq N \leq 10^6$ ), n the size of the array ,m size of range , k the postion of number that nada needs.

The next line will contain  $N$  integer  $a$  ( $1 \leq a \leq 10^9$ ).

### Output

find the number that Mubarak needs.

### Example

input	Copy
1 6 3 4 1 2 4 7 6 3	
output	Copy
3	

### Note

Step 1- sort form 1 to 3 .. [1,2,4,7,6,3]

Step 2- sort form 2 to 4 .. [1,2,4,7,6,3]

Step 3- sort form 3 to 5 .. [1,2,4,6,7,3]


step 4 -sort from 4 to 6 .. [1,2,4,3,6,7]

the numer in postion 4 is 3.

**ICPC Assiut University Training - Juniors Phase 1 Sheets-2022**

Public

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→ **Group Contests**

- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 ( Binary search , Two pointers )
- Juniors Phase 1 Practice #3 ( STL 2 )
- Juniors Phase 1 Practice #2 ( STL 1 )
- Juniors Phase 1 Practice #1 ( Prefix sum , Frequency Array )

**Juniors Phase 1 Practice #3 ( STL 2 ).**

Finished

Practice



→ **About Time Scaling**

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the [link](#).

→ **Virtual participation**

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ **Submit?**

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ **Last submissions**

Submission	Time	Verdict
<a href="#">311946897</a>	Mar/23/2025 05:34	Accepted
<a href="#">311945642</a>	Mar/23/2025 05:12	Wrong answer on test 2