



## Second Largest in array 2

Problem Submissions Leaderboard Discussions

You have been given a random integer array (ARR) of size N. You are required to find and return the second largest element present in the arraylist.

If  $N \leq 1$  or all the elements are same in the arraylist then return -2147483648 or  $-2^{31}$  (it is the smallest value for the range of Integer)

$arr[i] > first\_max$   
 $arr[i] > second\_max$   
 $first\_max = -2^{31}$  → Largest element in the array  
 $second\_max = -2^{31}$  → second largest element in the array.

$n=9$   
 2 2 2 2 2 2 2 2 2

$first\_max < arr[i] < second\_max$   
 $\hookrightarrow second\_max = arr[i]$

$n=7$   
 2 1 4 1 3 6 2  
 13

arr[0] first\_max  
 second\_max

Sample Input 0

7  
 2 13 4 1 3 6 20

Sample Output 0

13

Sample Input 1

5  
 9 3 6 2 9

Sample Output 1

6

0 1 2 3 4  
 9 3 6 2 9

$i=0 < 5(T)$   
 $first\_max = 9$   
 $second\_max = -2^{31}$

$i=1 < 5(T)$   
 $first\_max = 9$   
 $second\_max = 3$

$first\_max = -2^{31}$   
 $second\_max = -2^{31}$

$i=2 < 5(T)$   
 $first\_max = 9$   
 $second\_max = 6$

$i=3 < 5(T)$   
 $first\_max = 9$   
 $second\_max = 6$

$i=4 < 5(T)$   
 $first\_max = 9$   
 $second\_max = 6$

6

larger  
 $arr[i]$   
 $sm \rightarrow second\_max$

$first\_max < arr[i] < second\_max$   
 $\hookrightarrow second\_max = arr[i]$

else if ( $arr[i] > sm$ )  
 $sm = arr[i]$

$n=2$   
 0 1 2 3 4 5 6  
 first\_max = -2  
 second\_max = -2

$i=0 < 7(T)$   
 $second\_max = -2$   
 $first\_max = -2$

$i=1 < 7(T)$   
 $second\_max = 2$   
 $first\_max = 2$

$i=2 < 7(T)$   
 $first\_max = 2$   
 $second\_max = 2$

$i=3 < 7(T)$   
 $first\_max = 2$   
 $second\_max = 2$

$i=4 < 7(T)$   
 $first\_max = 2$   
 $second\_max = 2$

$i=5 < 7(T)$   
 $first\_max = 2$   
 $second\_max = 2$

$i=6 < 7(T)$   
 $first\_max = 2$   
 $second\_max = 2$

$i=3 < 7(T)$   
 $first\_max = 18$   
 $second\_max = 9$

$i=4 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 9$

$i=5 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=6 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=7 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=8 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=9 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=10 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$i=11 < 7(T)$   
 $first\_max = 13$   
 $second\_max = 6$

$3 > 13$   
 $3 > 4$   
 $6 > 4$   
 $2 > 13$   
 $i = 2 < 7(T)$

$3 > 4$   
 $3 > 9$   
 $6 > 13$   
 $6 > 4$

$6 > 13$   
 $6 > 4$   
 $2 > 13$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

$2 > 13$   
 $2 > 4$   
 $2 > 9$

# GKSTR36 Count\_IndexValue\_Element

Problem

Submissions

Leaderboard

Discussions

Given an integer  $n$ , the task is to define an array `arr[]` of size  $n$  &

Print the count of element whose value is equal to its index value,

Sample Input 0

5  
4  
1  
5  
3  
5

Sample Output 0

2



$\downarrow$   
 $if (arr[i] == i) \rightarrow count++$

# Print First NON MATCHING NUMBER

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Declare the first array of size  $n$  that stores values of int data-type. Then take  $n$  integer inputs and store them in the array one by one.

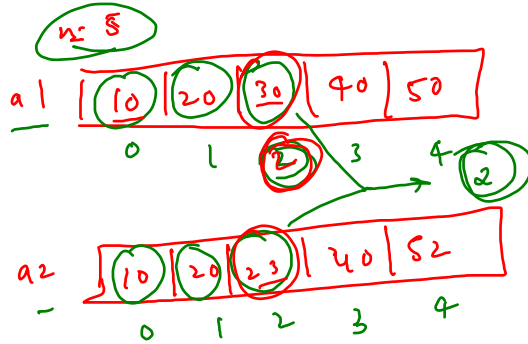
Then again declare a second array of size  $n$  that stores values of int data-type. Then take  $n$  integer inputs and store them in the array one by one. Then print the index at which you find the first non matching number in the array.

Sample Input 0

5  
10  
20  
30  
40  
50  
10  
20  
23  
40  
52

Sample Output 0

2



return

```
for (int i=0; i<n; i++)  
{  
    if (a1[i] != a2[i])  
        return i;  
}
```

return -1 by default