

3. (b) Test 3

Test Summary

- No. of Sections: 2
- No. of Questions: 3
- Total Duration: 45 min

Section 1 - Coding Proficiency

Section Summary

- No. of Questions: 2
- Duration: 30 min

Additional Instructions:

None

Q1. **Less than Key element**
Print and count all the numbers which are less than a given key element from a given array

Input Format

Input contains the no of elements , key value and the elements

Output Format

print the count

Constraints

$1 \leq n \leq 10^5$
 $1 \leq \text{key} \leq 10^9$

Sample Input

Sample Output

10 163 9058 364 986 23 98 123 546 908 675 53	4
---	---

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2. **Eliminate Repeated Elements**
Given two positive integer arrays ary1 and arr2 of lengths len1 and len2 respectively. write a program to count the number of elements which are not common In the arrays.
The input to the function distinctElementCount of two arrays arr1 and arr2 and their lengths len1 and len2 respectively.
The function return the number of elements which are not common in both arrays.
Example.
arr1 = {1, 2,3, 4, 5, 6, 7, 8, 9, 10}, lent = 10
arr2 = {11, 12, 13, 4, 5, 6, 7, 18, 19, 20}, len2 = 10
The distinct elements are 1, 2, 3, 8, 9, 10, 11, 12, 13, 18, 19 and 20 so the function should return 12.

Input Format

Input contains the length of the arrays and the values

Output Format

Print non repeating elements in { } and the count

Constraints

$1 \leq n \leq 10^5$
 $1 \leq \text{values} \leq 10^9$

Sample Input

Sample Output

5 6 34 89 12 45 93 12 93 45 23 78 35	5
--	---

Time Limit: - ms Memory Limit: - kb Code Size: - kb



Section 2 - Essay Writing

Section Summary

- No. of Questions: 1
- Duration: 15 min

Additional Instructions:

None

Q1. **ESSAY WRITING**

Write a response that expresses your thoughts on this statement. To what extent do you agree or disagree? Explain your reasoning.

Directions

The tight curriculum of our education system leaves no room for imagination and creativity.

Keywords



Answer Key & Solution

Section 1 - Coding Proficiency

Q1

Test Case

Input

Output

7078 28130 3129 14079 5758 17663 19760 18801 26204 10757 2495	6059
--	------

Weightage - 10

Input

Output

7 12 67 56 34 87 98 73 21	0
------------------------------	---

Weightage - 5

Input

Output

5 56 34 89 12 45 93	3
------------------------	---

Weightage - 5

Input

Output

6103 25417 16021 30390 10103 9272 29080 11390 2277 10710 1956	4732
--	------

Weightage - 10

Input

Output

19451 5868 8173 22689 16332 28966 6263 24729 15715 31012 1496	3541
--	------

Weightage - 10

Input

Output

12916 2171 10815 29404 762 31153 12678 17038 143 25386 21935	838
---	-----

Weightage - 10

Input

Output

3647 8450 29273 9571 2886 16390 1082 3893 10927 6513 26189	974
---	-----

Weightage - 10



weightage - 10

Input

Output

9511 5017
15504 18679 8521 9585 8333 19377 6992 1536 4918 1

1552

Weightage - 10

Input

Output

26038 29524
12764 399 27717 27559 2083 5944 24333 63 27337 22

23475

Weightage - 10

Input

Output

13983 14799
17480 25653 5142 11369 9919 31802 17154 6899 18550

6324

Weightage - 10

Input

Output

27880 26102
22587 3793 4555 26587 3873 2468 17162 28220 12267

22126

Weightage - 10

Sample Input

Sample Output

10 163
9058 364 986 23 98 123 546 908 675 53

4

Solution

```
#include <stdlib.h>
#include<stdio.h>
int main()
{

    int test_case,size,count=0,ctr,ind,key,arr[100000];
    //scanf("%d",&test_case);
    //for(ctr=0;ctr<test_case;ctr++)
    //{
        scanf("%d %d",&size,&key);
        for(ind=0;ind<size;ind++)
            scanf("%d",&arr[ind]);
        for(ind=0;ind<size;ind++)
        {
            if(arr[ind]<key)

                count++;
        }
        printf("%d",count);
    }
```



```

    //}
    return 0;
}

#include <stdlib.h>
#include<stdio.h>
int main()
{

    int test_case,size,count=0,ctr,ind,key,arr[100000];
    //scanf("%d",&test_case);
    //for(ctr=0;ctr<test_case;ctr++)
    //{
        scanf("%d %d",&size,&key);
        for(ind=0;ind<size;ind++)
            scanf("%d",&arr[ind]);
        for(ind=0;ind<size;ind++)
        {
            if(arr[ind]<key)
                count++;
        }
        printf("%d",count);
    //}
    return 0;
}
```

Q2 **Test Case**

Input

10 3
9058 364 986 23 98 123 546 908 675 53
23 53 98

Output

7

Weightage - 5

Input

6 7
23 364 98 234 79 244
67 56 34 87 98 73 21

Output

11

Weightage - 5

Input

69 6
780 3394 7197 3441 5275 8369 2833 9811 9302 888
4749 141 7179 2387 2880 956

Output

75

Weightage - 10

Input

29 67
1618 2896 8985 3551 86 5046 2599 8949 798 1786 2
5988 7559 6966 6516 6719 80 1636 6078 8635 51 25

Output

96



Weightage - 10

Input

Output

89 62
1078 2082 531 8230 1624 210 5346 347 3553 9690 6
1877 9399 329 1389 1559 5463 731 8632 743 2567 6

149

Weightage - 10

Input

Output

39 97
6032 7286 5319 4775 8233 7438 8287 8977 1102 833
5238 1191 4729 6751 363 908 5353 1808 3218 921 1

136

Weightage - 10

Input

Output

75 82
9241 5005 1946 7933 9731 4705 4248 5746 2850 8861
124 931 2140 8724 968 2119 853 9897 9234 9880 78

153

Weightage - 10

Input

Output

91 66
344 8919 9847 2204 4621 2698 2410 4855 6165 9736
4649 8670 1957 6701 2447 9656 3451 9900 7935 1401

153

Weightage - 10

Input

Output

79 20
7934 3881 1186 1292 2320 9530 3338 1158 3980 6081
8936 1845 9589 7566 6665 8211 3461 714 6796 8728

99

Weightage - 10

Input

Output

40 53
102 1692 3431 355 5621 4544 5959 2200 6230 8571
9827 6085 6575 3646 3111 9706 9193 3816 997 7760

93

Weightage - 10

Input

Output

69 4
9721 5837 8601 9665 6096 3995 4771 2977 5751 8941
2905 7170 5687 2790

73

Weightage - 10

Sample Input

Sample Output



Sample Input

5 6
34 89 12 45 93
12 93 45 23 78 35

Sample Output

5

Solution

Header

```
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
```

```
int distinctElementCount( int *arr1,int *arr2,int size1,int size2)
{
    int index1,index2=0,output[100000],search;
    for(index1=0; index1<size1 ; index1++)
    {
        search=arr1[index1] ; for(index2=0 ; index2<size2 ; index2++)
        {
            if(search == arr2[index2])
            {
                arr1[index1] = -1;
                arr2[index2] = -1;
            }
        }
    }
    index2=0;
    for(index1 = 0 ; index1<size1 ; index1++)
    {
        if(arr1[index1]!=-1)
            output[index2++] = arr1[index1];
    }
    for(index1 = 0 ; index1<size2 ; index1++)
    {
        if(arr2[index1]!=-1)
            output[index2++] = arr2[index1];
    }
    return index2;
}
```

Footer

```
int main() {

    int arr1[100000],arr2[100000];
    int size1, size2, index1, index2, test,ctr,search;
    //scanf("%d",&test);
    //for(ctr=1 ; ctr<=test ; ctr++)
    //{
        scanf("%d%d",&size1, &size2);
        for(index1=0;index1<size1;index1++)
            scanf("%d",&arr1[index1]);
        for(index1=0;index1<size2;index1++)
            scanf("%d",&arr2[index1]);

        index2=distinctElementCount(arr1,arr2,size1,size2);
```



```
printf("%d",index2);

//for(index1 = 0 ; index1<100 ; index1++)
//  output[index1]=-1;
//}

return 0;
}
```

Header

```
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
```

```
int distinctElementCount( int *arr1,int *arr2,int size1,int size2)
{
    int index1,index2=0,output[100000],search;
    for(index1=0; index1<size1 ; index1++)
    {
        search=arr1[index1] ; for(index2=0 ; index2<size2 ; index2++)
        {
            if(search == arr2[index2])
            {
                arr1[index1] = -1;
                arr2[index2] = -1;
            }
        }
    }
    index2=0;
    for(index1 = 0 ; index1<size1 ; index1++)
    {
        if(arr1[index1]!=-1)
            output[index2++] = arr1[index1];
    }
    for(index1 = 0 ; index1<size2 ; index1++)
    {
        if(arr2[index1]!=-1)
            output[index2++] = arr2[index1];
    }
    return index2;
}
```

Footer

```
int main() {

    int arr1[100000],arr2[100000];
    int size1, size2, index1, index2, test,ctr,search;
    //scanf("%d",&test);
    //for(ctr=1 ; ctr<=test ; ctr++)
    //{
        scanf("%d%d",&size1, &size2);
        for(index1=0;index1<size1;index1++)
            scanf("%d",&arr1[index1]);
        for(index1=0;index1<size2;index1++)
            scanf("%d",&arr2[index1]);
    }
```



```
        index2=distinctElementCount(arr1,arr2,size1,size2);

printf("%d",index2);
//for(index1 = 0 ; index1<100 ; index1++)
    //  output[index1]=-1;
//}

return 0;
}
```

Section 2 - Essay Writing

Q1 Sample Essay

No Essay

Keywords

TIGHT, CURRICULUM, OUR, EDUCATION, SYSTEM, LEAVES, NO, ROOM, IMAGINATION, CREATIVITY,

