Dashb... / My cou... / CS23331-DAA-202... / Competitive Progra... / 3-Print Intersection of 2 sorted arrays-O(m*n)Time Complexity,O(1) Sp...

| Started on | Friday, 16 August 2024, 1:47 PM |
|--------------|---|
| State | Finished |
| Completed on | Friday, 16 August 2024, 1:59 PM |
| Time taken | 11 mins 48 secs |
| Marks | 1.00/1.00 |
| Grade | 30.00 out of 30.00 (100 %) |

```
Question 1
Correct
Mark 1.00 out of 1.00
```

Find the intersection of two sorted arrays.

OR in other words,

Given 2 sorted arrays, find all the elements which occur in both the arrays.

Input Format

- · The first line contains T, the number of test cases. Following T lines contain:
- 1. Line 1 contains N1, followed by N1 integers of the first array
- 2. Line 2 contains N2, followed by N2 integers of the second array

Output Format

The intersection of the arrays in a single line

Example

Input:

1

3 10 17 57

6 2 7 10 15 57 246

Output:

10 57

Input:

1

6123456

2 1 6

Output:

16

For example:

| Input | Result | |
|------------------|--------|--|
| 1 | 10 57 | |
| 3 10 17 57 | | |
| 6 | | |
| 2 7 10 15 57 246 | | |

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
 2
   int main()
 3 ▼ {
 4
         int t;
         scanf("%d",&t);
 5
 6 •
         while(t){
 7
          int n1,n2;
scanf("%d",&n1);
 8
 9
10
          int a[n1];
          for(int i=0;i<n1;i++)</pre>
11
12
          {
               scanf("%d",&a[i]);
13
14
          }
15
          scanf("%d",&n2);
16
          int b[n2];
17
18
          for(int i=0;i<n2;i++)</pre>
19
          {
              scanf("%d",&b[i]);
20
21
          }
22
```

```
11/17/24, 8:00 AM
```

```
TOP(1NT 1=0;1<N1;1++)
23
24
          {
25
               for(int j=0;j<n2;j++)</pre>
26
               {
                    if(a[i]==b[j])
printf("%d ",a[i]);
27
28
29
               }
30
31
          t--;
32
33
34
```

| | Input | Expected | Got | |
|----------|--------------------------------|----------|-------|----------|
| ~ | 1 3 10 17 57 6 | 10 57 | 10 57 | ~ |
| | 2 7 10 15 57 246 | | | |
| ~ | 1 6 1 2 3 4 5 6 2 1 6 | 1 6 | 1 6 | ~ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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■ 2-Finding Duplicates-O(n) Time Complexity,O(1) Space Complexity

Jump to...

4-Print Intersection of 2 sorted arrays-O(m+n)Time Complexity,O(1) Space Complexity ►