

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

<b>Started on</b>	Saturday, 9 November 2024, 11:05 AM
<b>State</b>	Finished
<b>Completed on</b>	Saturday, 9 November 2024, 11:09 AM
<b>Time taken</b>	3 mins 47 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>30.00</b> out of 30.00 ( <b>100%</b> )

## 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:

- Line 1 contains N1, followed by N1 integers of the first array
- 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
6 1 2 3 4 5 6
2 1 6
```

Output:

```
1 6
```

**For example:**

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

**Answer:** (penalty regime: 0 %)

```
1 #include <stdio.h>
2
3 int main(){
4     int t;
5     scanf("%d",&t);
6     while(t){
7         int n1;
8         scanf("%d",&n1);
9         int arr[n1];
10        for(int i=0 ; i<n1 ; i++){
11            scanf("%d",&arr[i]);
12        }
13        int n2;
14        scanf("%d",&n2);
15        int brr[n2];
16        for(int i=0 ; i<n2 ; i++){
17            scanf("%d",&brr[i]);
18        }
19        for(int i=0 ; i<n1 ; i++){
20            for(int j=0 ; j<n2 ; j++){
21                if(arr[i] == brr[j]){
22                    printf("%d ", arr[i]);
23                }
24            }
25        }
26        printf("\n");
27    }
28 }
```

```
23 |         }  
24 |     }  
25 |     t--;  
26 | }  
27 | }
```

	Input	Expected	Got	
✓	1 3 10 17 57 6 2 7 10 15 57 246	10 57	10 57	✓
✓	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.

//

◀ 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 ▶