

[Dashb...](#) / [My cou...](#) / [CS23331-DAA-202...](#) / [Competitive Progra...](#) / [4-Print Intersection of 2 sorted arrays- \$O\(m+n\)\$ Time Complexity, \$O\(1\)\$ S...](#)

<b>Started on</b>	Tuesday, 5 November 2024, 2:08 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 5 November 2024, 2:09 PM
<b>Time taken</b>	53 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:

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
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 a;
5     scanf("%d",&a);
6     while(a>0){
7         int m, n;
8
9         scanf("%d", &m);
10        int arr1[m];
11        for (int i = 0; i < m; i++) {
12            scanf("%d", &arr1[i]);
13        }
14
15        scanf("%d", &n);
```

```

16     int arr2[n];
17     for (int i = 0; i < n; i++) {
18         scanf("%d", &arr2[i]);
19     }
20
21     int i=0,j=0;
22     while(i<m && j<n){
23         if(arr1[i]==arr2[j]){
24             printf("%d ",arr1[i]);
25             i++;
26             j++;
27         }
28         else if(arr1[i]<arr2[j]){
29             i++;
30         }
31         else{
32             j++;
33         }
34     }
35     printf("\n");
36     a--;
37 }
38 }

```

	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.

◀ 3-Print Intersection of 2 sorted arrays-O(m\*n)Time Complexity,O(1) Space Complexity

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5-Pair with Difference-O(n^2)Time Complexity,O(1) Space Complexity ▶