

[Dashbo...](#) / [My.cou...](#) / [CS23331-DAA-20...](#) / [Competitive Progra...](#) / [3-Print Intersection of 2 sorted arrays- \$O\(m \cdot n\)\$ Time Complexity, \$O\(1\)\$ Sp...](#)

| | |
|------------------|-------------------------------------------|
| Status | Finished |
| Started | Saturday, 12 April 2025, 1:19 PM |
| Completed | Saturday, 12 April 2025, 1:20 PM |
| Duration | 37 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
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
7     while(t--) {
8         int n;
9         scanf("%d", &n);
10        int arr[n];
11        for(int i = 0; i < n; i++) {
12            scanf("%d", &arr[i]);
13        }
14
15        int m;
16        scanf("%d", &m);
17        int brr[m];
18        for(int i = 0; i < m; i++) {
19            scanf("%d", &brr[i]);
20        }
21
22        int i = 0, j = 0;
```

```

23 while(i < n || j < m) {
24     if(arr[i] < brr[j]) {
25         i++;
26     } else if(arr[i] > brr[j]) {
27         j++;
28     } else {
29         printf("%d ", arr[i]);
30         i++;
31         j++;
32     }
33 }
34
35 printf("\n");
36 }
37
38 return 0;
39 }
40

```

| | 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 ▶