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Status	Finished
Started	Saturday, 19 April 2025, 9:20 AM
Completed	Saturday, 19 April 2025, 9:34 AM
Duration	13 mins 54 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, n1, n2, i, j;
5     scanf("%d", &t);
6
7     while (t--) {
8         scanf("%d", &n1);
9         int arr1[n1];
10        for (i = 0; i < n1; i++)
11            scanf("%d", &arr1[i]);
12
13        scanf("%d", &n2);
14        int arr2[n2];
15        for (i = 0; i < n2; i++)
16            scanf("%d", &arr2[i]);
17
18        i = 0;
19        j = 0;
20        while (i < n1 && j < n2) {
21            if (arr1[i] == arr2[j]) {
22                printf("%d ", arr1[i]);
23                i++;
24                j++;
25            }
26        }
27        printf("\n");
28    }
29 }
```

```

23         i++;
24         j++;
25     } else if (arr1[i] < arr2[j]) {
26         i++;
27     } else {
28         j++;
29     }
30 }
31 printf("\n");
32 }
33 return 0;
34 }
35

```

	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

Jump to...

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