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Started on	Friday, 8 November 2024, 9:17 PM
State	Finished
Completed on	Friday, 8 November 2024, 9:21 PM
Time taken	3 mins 38 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 %)

```






#include<stdio.h>

int main() {
    int t;
    scanf("%d", &t);

    while (t--) {
        int n1, n2;
        scanf("%d", &n1);
        int a[n1];
        for (int i = 0; i < n1; i++) {
            scanf("%d", &a[i]);
        }

        scanf("%d", &n2);
        int b[n2];
        for (int i = 0; i < n2; i++) {
            scanf("%d", &b[i]);
        }

        int i = 0, j = 0;
        int first = 1;
        while (i < n1 && j < n2) {
            if (a[i] < b[j]) {
                i++;
            } else if (a[i] > b[j]) {
                j++;
            } else {
                if (first) {
                    printf("%d", a[i]);
                    first = 0;
                } else {
                    printf(" %d", a[i]);
                }
                i++;
                j++;
            }
        }
        printf("\n");
    }

    return 0;
}
```

	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

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