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

Started on	Wednesday, 15 October 2025, 8:49 AM
State	Finished
Completed on	Wednesday, 15 October 2025, 9:02 AM
Time taken	12 mins 52 secs
Marks	1.00/1.00
Grade	**30.00** out of 30.00 (**100**%)

Question 1 Correct Mark 1.00 out of 1.00 Flag question

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 %)

```c
#include <stdio.h>
void findIntersection(int a[], int n1, int b[], int n2) {
    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(" ");
            }
            printf("%d", a[i]);
            first = 0;
            i++;
            j++;
        }
    }
    printf("\n");
}
```

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

    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.

Finish review

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Data retention summary