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

Started on	Sunday, 12 October 2025, 7:09 PM
State	Finished
Completed on	Sunday, 12 October 2025, 7:10 PM
Time taken	45 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>

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

    while (T--) {
        int N1, N2;
        scanf("%d", &N1);
        int arr1[N1];
        for (int i = 0; i < N1; i++) scanf("%d", &arr1[i]);

        scanf("%d", &N2);
        int arr2[N2];
        for (int i = 0; i < N2; i++) scanf("%d", &arr2[i]);

        int i = 0, j = 0;
        int first = 1;

        while (i < N1 && i < N2) {
```

```
            if (arr1[i] == arr2[j]) {
                if (!first) printf(" ");
                printf("%d", arr1[i]);
                first = 0;
                i++; j++;
            } else if (arr1[i] < arr2[j]) {
                i++;
            } else {
                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.

Finish review

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Data retention summary