

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

Started on	Sunday, 19 October 2025, 8:22 PM
State	Finished
Completed on	Sunday, 19 October 2025, 8:27 PM
Time taken	4 mins 21 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:
 - Line 1 contains N1, followed by N1 integers of the first array
 - 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	10 57
6 2 7 10 15 57 246	
2 7 10 15 57 246	

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 void find(int a[],int m,int b[],int n){
3     int i=0,j=0;
4     while(i<m && j<n){
5         if(a[i]<b[j]){
6             i++;
7         }
8         else if(a[i]>b[j]){
9             j++;
10        }
11        else{
12            printf("%d ",a[i]);
13            i++;
14            j++;
15        }
16    }
17    printf("\n");
18 }
19 int main(){
20     int c;
21     scanf("%d",&c);
22     while(c--){
23         int m,n;
24         scanf("%d",&m);
25         int a[m];
26         for(int i=0;i<m;i++){
27             scanf("%d",&a[i]);
28         }
29         scanf("%d",&n);
30         int b[n];
31         for(int i=0;i<n;i++){
32             scanf("%d",&b[i]);
33         }
34         find(a,m,b,n);
35     }
36 }
```

	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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