

CS23331-Design and Analysis of Algorithms-2023 Batch-CSE

Dashboard / My courses / CS23331-DAA-2023-CSE / Competitive Programming / 4-Print Intersection of 2 sorted arrays-O(m+n)Time Complexity,O(1) Space Complexity

Quiz navigation



[Finish review](#)

Started on	Tuesday, 5 November 2024, 1:42 PM
State	Finished
Completed on	Tuesday, 5 November 2024, 1:57 PM
Time taken	15 mins 23 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 6 2 7 10 15 57 246	10 57

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main(){
3     int t,n1,n2;
4     scanf("%d",&t);
5     scanf("%d",&n1);
6     int arr1[n1];
7     for(int i=0;i<n1;i++){
8         scanf("%d",&arr1[i]);
9     }
10    scanf("%d",&n2);
11    int arr2[n2];
12    for(int i=0;i<n2;i++){
13        scanf("%d",&arr2[i]);
14    }
15
16    for(int i=0;i<n1;i++){
17        for(int j=0;j<n2;j++){
18            if(arr1[i]==arr2[j]){
19                printf("%d ",arr1[i]);
20            }
21        }
22    }
23 }
24
25
```

	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](#)

→ [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](#) →