

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

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Quiz navigation



Finish review

Started on	Friday, 25 October 2024, 2:23 PM
State	Finished
Completed on	Friday, 25 October 2024, 2:32 PM
Time taken	9 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:
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 %)

```
1 #include <stdio.h>
2 int main(){
3     int t,an,bn;
4     scanf("%d",&t);
5     scanf("%d",&an);
6     int a[an];
7     for(int i=0;i<an;i++){
8         scanf("%d",&a[i]);
9     }
10    int b[bn];
11    for(int i=0;i<bn;i++){
12        scanf("%d",&b[i]);
13    }
14    int i=0;
15    while(i<an && j<bn){
16        if(a[i]==b[j]){
17            printf("%d ",a[i]);
18            i++;
19            j++;
20        }
21        else if(a[i]>b[j]){
22            j++;
23        }
24        else{
25            i++;
26        }
27    }
28 }
```

	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

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5-Pair with Difference-O(n^2)Time Complexity,O(1) Space Complexity