

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

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Quiz navigation



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Status	Finished
Started	Tuesday, 22 April 2025, 3:00 PM
Completed	Tuesday, 22 April 2025, 3:06 PM
Duration	6 mins 25 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
2 #include <stdio.h>
3 int main() {
4     int k;
5     scanf("%d", &k);
6     for (int x = 0; x < k; x++) {
7         int m, n;
8         scanf("%d", &m);
9         int a[m];
10        for (int i = 0; i < m; i++) {
11            scanf("%d", &a[i]);
12        }
13        scanf("%d", &n);
14        int b[n];
15        for (int i = 0; i < n; i++) {
16            scanf("%d", &b[i]);
17        }
18        for (int i = 0; i < m; i++) {
19            for (int j = 0; j < n; j++) {
20                if (a[i] == b[j]) {
21                    printf("%d ", a[i]);
22                    break;
23                }
24            }
25        }
26        printf("\n");
27    }
28    return 0;
29 }
30
```

	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.

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[◀ 2-Finding Duplicates- \$O\(n\)\$ Time Complexity, \$O\(1\)\$ Space Complexity](#)

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[4-Print Intersection of 2 sorted arrays- \$O\(m+n\)\$ Time Complexity, \$O\(1\)\$ Space Complexity ▶](#)