



Dashboard My courses

Q.

CS23331-DAA-2024-CSE / 4-Print Intersection of 2 sorted arrays-O(m+n)Time Complexity,O(1) Space Complexity



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

| Started on | Wednesday, 8 October 2025, 9:35 AM |
|--------------|---|
| State | Finished |
| Completed on | Wednesday, 15 October 2025, 8:22 AM |
| Time taken | 6 days 22 hours |
| 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

6123456

216

Output:

16

For example:

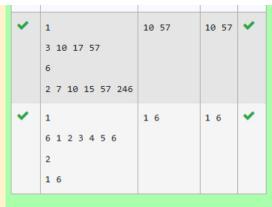
| Input | Result |
|------------------|--------|
| 1 | 10 57 |
| 3 10 17 57 | |
| 6 | |
| 2 7 10 15 57 246 | |

Answer: (penalty regime: 0 %)

```
#include <stdio.h>

void findIntersection(int arr1[], int n1, int arr2[], int n2) {
   int i = 0, j = 0;
}
```

```
5
        while (i < n1 \&\& j < n2) {
 6 ,
7,
           if (arr1[i] == arr2[j]) {
8
               printf("%d ", arr1[i]);
9
                i++;
10
                j++;
            } else if (arr1[i] < arr2[j]) {</pre>
11
12
               i++;
13
            } else {
14
                j++;
15
16
17
        printf("\n");
18
19
20
   int main() {
21
        int T;
22
        scanf("%d", &T);
23
24 1
        while (T--) {
25
       int n1, n2;
26
27
            // Read first array
28
           scanf("%d", &n1);
29
            int arr1[n1];
            for (int i = 0; i < n1; i++) {
30
31
               scanf("%d", &arr1[i]);
32
33
34
            // Read second array
35
            scanf("%d", &n2);
36
            int arr2[n2];
37
            for (int i = 0; i < n2; i++) {
               scanf("%d", &arr2[i]);
38
39
40
41
            // Find and print intersection
42
            findIntersection(arr1, n1, arr2, n2);
43
44
45
        return 0;
46
47
```



Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

Finish review

Back to Course

Data retention summary