RAJALAKSHMI ENGINEERING COLLEGE

🔔 8   **SRIRAM S (12/08/2006) 2024-IT** ⌄   **S2**

Started on	Wednesday, 5 November 2025, 4:21 AM
State	Finished
Completed on	Wednesday, 5 November 2025, 4:23 AM
Time taken	2 mins 3 secs
Marks	1.00/1.00
Grade	**30.00** out of 30.00 (**100**%)

Question 1 | Correct   Mark 1.00 out of 1.00

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 %)

```c
#include <stdio.h>

// Function to find and print intersection of two sorted arrays
void findIntersection(int arr1[], int n1, int arr2[], int n2) {
    int i = 0, j = 0;

    while (i < n1 && j < n2) {
        if (arr1[i] < arr2[j])
            i++;
        else if (arr1[i] > arr2[j])
            j++;
        else {
            printf("%d ", arr1[i]);
            i++;
```

```
15              j++;
16          }
17      }
18      printf("\n");
19  }
20
21  int main() {
22      int T;
23      scanf("%d", &T);
24
25      while (T--) {
26          int n1;
27          scanf("%d", &n1);
28          int arr1[n1];
29          for (int i = 0; i < n1; i++)
30              scanf("%d", &arr1[i]);
31
32          int n2;
33          scanf("%d", &n2);
34          int arr2[n2];
35          for (int i = 0; i < n2; i++)
36              scanf("%d", &arr2[i]);
37
38          findIntersection(arr1, n1, arr2, n2);
39      }
40
41      return 0;
42  }
43
```

	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.

Back to Course