Started on	Friday, 8 November 2024, 9:21 PM
State	Finished
Completed on	Friday, 8 November 2024, 9:24 PM
Time taken	2 mins 34 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 %)

```
1
2
3
4
5
6
7   #include<stdio.h>
8
9 ▾ int main() {
10      int t;
11      scanf("%d", &t);
12
13 ▾    while (t--) {
14          int n1, n2;
15          scanf("%d", &n1);
```

```
16              int a[n1];
17  ▾           for (int i = 0; i < n1; i++) {
18                  scanf("%d", &a[i]);
19              }
20
21              scanf("%d", &n2);
22              int b[n2];
23  ▾           for (int i = 0; i < n2; i++) {
24                  scanf("%d", &b[i]);
25              }
26
27              int i = 0, j = 0;
28              int first = 1;
29  ▾           while (i < n1 && j < n2) {
30  ▾               if (a[i] < b[j]) {
31                      i++;
32  ▾               } else if (a[i] > b[j]) {
33                      j++;
34  ▾               } else {
35  ▾                   if (first) {
36                          printf("%d", a[i]);
37                          first = 0;
38  ▾                   } else {
39                          printf(" %d", a[i]);
40                      }
41                      i++;
42                      j++;
43                  }
44              }
45              printf("\n");
46          }
47
48          return 0;
49      }
```

	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.

◄ 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 ►