



M2

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 | #include <stdio.h>
2 |
3 | void findIntersection(int arr1[], int n1, int arr2[], int n2) {
4 |     int i = 0, j = 0;
5 |     while (i < n1 && j < n2) {
6 |         if (arr1[i] == arr2[j]) {
7 |             printf("%d ", arr1[i]);
8 |             i++;
9 |             j++;
10 |        } else if (arr1[i] < arr2[j]) {
11 |            i++;
12 |        } else {
13 |            j++;
14 |        }
15 |    }
16 |    printf("\n");
17 | }
18 |
19 | int main() {
20 |     int T;
21 |     scanf("%d", &T);
22 | }

```

```
23 while (T--) {
24     int n1;
25     scanf("%d", &n1);
26     int arr1[n1];
27     for (int i = 0; i < n1; i++)
28         scanf("%d", &arr1[i]);
29
30     int n2;
31     scanf("%d", &n2);
32     int arr2[n2];
33     for (int i = 0; i < n2; i++)
34         scanf("%d", &arr2[i]);
35
36     findIntersection(arr1, n1, arr2, n2);
37 }
38
39 return 0;
40 }
```

	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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