Dashb... / My cou... / CS23331-DAA-202... / Competitive Progra... / 3-Print Intersection of 2 sorted arrays-O(m*n)Time Complexity,O(1) Sp...

Started on	Friday, 25 October 2024, 2:42 PM
State	Finished
Completed on	Friday, 25 October 2024, 2:53 PM
Time taken	11 mins 6 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  #include<stdio.h>
 2  int main()
 3  {
 4      int t;
 5       scanf("%d\n",&t);
 6      while(t>0){
 7      int m;
 8      scanf("%d ",&m);
 9      int arr[m];
10      for(int i=0;i<m;i++)
11      {
12          scanf("%d ",&arr[i]);
13      }
14      int n;
15      scanf("%d ",&n);
```

```
16      int brr[n];
17      for(int i=0;i<n;i++)
18    {
19          scanf("%d ",&brr[i]);
20      }
21      int n3=0;
22      int crr[m<n?m:n];
23          for(int i=0;i<m;i++)
24        {
25              for(int j=0;j<n;j++)
26            {
27                  if(brr[j]==arr[i])
28                {
29                      crr[n3++]=arr[i];
30                      break;
31                  }
32              }
33          }
34          for(int i=0;i<n3;i++)
35        {
36              printf("%d ",crr[i]);
37          }
38          t--;
39      }
41  }
```

	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.

◄ 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 ►