	Marwadi University
(Marwadi University logo)	**Faculty of Technology**
	Department of Information and Communication Technology
Sem : 5	**Name :Pushti Depani**
Day : 21	**Date : 07/11/2022**	**Enrollment No: 92000133018**

CP Club 365Days Challenge

Date – 07/11/2022
Programming language – only C language

Problem Statement
Write the code not just for one input but for many more.(Dynamic code)
Code must be in C language only

Alice has an array A of length N which is initially a permutation. She dislikes K numbers which are B₁, B₂,…,Bₖ all of which are distinct. Therefore, she removes all the occurrences of these numbers from A. The order of the remaining elements of the A does not change. Can you find out the resulting array A?

Note: A permutation of length N is an array where every integer from 11 to NN occurs exactly once.

Input Format

- The first line contains a single integer TT — the number of test cases. Then the test cases follow.
- The first line of each test case contains an integer NN — the size of the array AA.
- The second line of each test case contains NN integers A_1, A_2, \ldots, A_N$A1,A2,…,AN$ denoting the array AA.
- The third line of each test case contains an integer KK — the size of the array BB.
- The fourth line of each test case contains KK integers B_1, B_2, \ldots, B_K$B1,B2,…,BK$ denoting the numbers which Alice dislikes.

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Input:

```
3
4
4 1 3 2
2
3 1
9
5 2 9 1 8 6 4 3 7
3
5 8 9
5
3 4 5 1 2
2
2 3
```

Output:

```
4 2
2 1 6 4 3 7
4 5 1
```

Explanation:

Test Case 1: Here A = [4, 1, 3, 2]*A*=[4,1,3,2] and B = [3, 1]*B*=[3,1]. The resulting array A*A* after removing all the numbers which Alice dislikes is [4, 2][4,2].

Your Code:

```c
#include <stdio.h>
#include <string.h>
int occurance(int[],int[],int,int);
void element(int[],int,int);

int main(){
```

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```
    int l,i,j;
    scanf("%d",&l);

    for(i=0;i<l;i++){
        int p,q;
        scanf("%d",&p);
        int d[p];
        for(j=0;j<p;j++){
            scanf("%d",&d[j]);
        }
        scanf("%d",&q);
        int c[q];
        for(j=0;j<q;j++){
            scanf("%d",&c[j]);
        }
        int o = occurance(d,c,p,q);
        for(j=0;j<o;j++){
            printf("%d ",d[j]);
        }
        printf("\n");
    }

    return 0;
}


int occurance(int a[],int b[],int t1, int t2){
    int i,j;
    for(i=0;i<t2;i++){
        for(j=0;j<t1;j++){
            if(a[j]==b[i]){
```

```
                        element(a,j,t1);
                        t1--;
                }
            }
        }
    return t1;
}

void element(int a[],int m,int n){
    int i;
    for(i=m;i<n;i++){
        a[i]=a[i+1];
    }
}
```

Output (Screen Shot):

D:\cp club\day_21.exe

```
3
4
4 1 3 2
2
3 1
4 2
9
5 2 9 1 8 6 4 3 7
3
5 8 9
2 1 6 4 3 7
5
3 4 5 1 2
2
2 3
4 5 1

--------------------------------
Process exited after 94.7 seconds with return value 0
Press any key to continue . . .
```

Understanding about problem:
The problem was all about how to remove the occurrence and the element from a given group of elements. Using nested for loop we can do this.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST
Team CP Club