

## CSE107 PRE-LAB ASSIGNMENT WEEK 8

You are given two arrays  $A$  and  $B$ , each of length 5. Your task is to determine if it is possible to make  $A$  equal to  $B$  by reversing any subarrays of  $B$  any number of times.

Write a program in **C** to solve this problem.

### Example Input:

```
Enter 5 elements for array A:
1 2 3 4 5
Enter 5 elements for array B:
5 4 3 2 1
```

### Example Output:

Yes, array B can be made equal to array A.

### Explanation:

By reversing the entire array  $B$ , we get  $[1, 2, 3, 4, 5]$ , which is equal to  $A$ .

### Example Input:

```
Enter 5 elements for array A:
1 2 3 4 5
Enter 5 elements for array B:
1 5 4 3 2
```

### Example Output:

Yes, array B can be made equal to array A.

### Explanation:

After reversing the subarray of  $B$  from indices 1 to 4, array  $B$  will equal array  $A$ .

### Example Input:

```
Enter 5 elements for array A:
1 2 3 1 4
Enter 5 elements for array B:
1 2 4 3 2
```

**Example Output:**

No, array B cannot be made equal to array A.

**Explanation:**

Even with any number of subarray reversals, it is not possible to rearrange  $B$  to make it equal to  $A$  because the frequency of elements in  $A$  and  $B$  do not match.

**Constraints:**

- Both arrays  $A$  and  $B$  must have exactly 5 elements. If not, the program will display a warning.
- Array elements must be integers. Otherwise, the program will warn the user.