

# Problem 1122: Relative Sort Array

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 75.01%

**Paid Only:** No

**Tags:** Array, Hash Table, Sorting, Counting Sort

## Problem Description

Given two arrays `arr1` and `arr2`, the elements of `arr2` are distinct, and all elements in `arr2` are also in `arr1`.

Sort the elements of `arr1` such that the relative ordering of items in `arr1` are the same as in `arr2`. Elements that do not appear in `arr2` should be placed at the end of `arr1` in \*\*ascending\*\* order.

**Example 1:**

**Input:** arr1 = [2,3,1,3,2,4,6,7,9,2,19], arr2 = [2,1,4,3,9,6] **Output:** [2,2,2,1,4,3,3,9,6,7,19]

**Example 2:**

**Input:** arr1 = [28,6,22,8,44,17], arr2 = [22,28,8,6] **Output:** [22,28,8,6,17,44]

**Constraints:**

\* `1 <= arr1.length, arr2.length <= 1000` \* `0 <= arr1[i], arr2[i] <= 1000` \* All the elements of `arr2` are \*\*distinct\*\*. \* Each `arr2[i]` is in `arr1`.

## Code Snippets

**C++:**

```
class Solution {  
public:  
vector<int> relativeSortArray(vector<int>& arr1, vector<int>& arr2) {  
  
}  
};
```

**Java:**

```
class Solution {  
public int[] relativeSortArray(int[] arr1, int[] arr2) {  
  
}  
}
```

**Python3:**

```
class Solution:  
def relativeSortArray(self, arr1: List[int], arr2: List[int]) -> List[int]:
```