

# Problem 3668: Restore Finishing Order

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 90.64%

**Paid Only:** No

**Tags:** Array, Hash Table

## Problem Description

You are given an integer array `order` of length `n` and an integer array `friends`.

\* `order` contains every integer from 1 to `n` \*\*exactly once\*\* , representing the IDs of the participants of a race in their \*\*finishing\*\* order. \* `friends` contains the IDs of your friends in the race \*\*sorted\*\* in strictly increasing order. Each ID in friends is guaranteed to appear in the `order` array.

Return an array containing your friends' IDs in their \*\*finishing\*\* order.

**Example 1:**

**Input:** order = [3,1,2,5,4], friends = [1,3,4]

**Output:** [3,1,4]

**Explanation:**

The finishing order is `[\_\*\*3\*\*\_ , \_\*\*1\*\*\_ , 2, 5, \_\*\*4\*\*\_]`. Therefore, the finishing order of your friends is [3, 1, 4].

**Example 2:**

**Input:** order = [1,4,5,3,2], friends = [2,5]

**Output:** [5,2]

**\*\*Explanation:\*\***

The finishing order is `[1, 4, \_ \*\*5\*\* \_, 3, \_ \*\*2\*\*\_]` . Therefore, the finishing order of your friends is `[5, 2]` .

**\*\*Constraints:\*\***

\* `1 <= n == order.length <= 100` \* `order` contains every integer from 1 to `n` exactly once \* `1 <= friends.length <= min(8, n)` \* `1 <= friends[i] <= n` \* `friends` is strictly increasing

## Code Snippets

**C++:**

```
class Solution {
public:
vector<int> recoverOrder(vector<int>& order, vector<int>& friends) {
    }
};
```

**Java:**

```
class Solution {
public int[] recoverOrder(int[] order, int[] friends) {
    }
}
```

**Python3:**

```
class Solution:
def recoverOrder(self, order: List[int], friends: List[int]) -> List[int]:
```