

126. You are given two integer arrays `nums1` and `nums2` of sizes `n` and `m`, respectively. Calculate the following values: `answer1` : the number of indices `i` such that `nums1[i]` exists in `nums2`. `answer2` : the number of indices `i` such that `nums2[i]` exists in `nums1`. Return `[answer1, answer2]`.

Example 1:

Input: `nums1 = [2,3,2]`, `nums2 = [1,2]`

Output: `[2,1]`

Explanation:

Example 2:

Input: `nums1 = [4,3,2,3,1]`, `nums2 = [2,2,5,2,3,6]`

Output: `[3,4]`

Explanation:

The elements at indices 1, 2, and 3 in `nums1` exist in `nums2` as well. So `answer1` is 3.

The elements at indices 0, 1, 3, and 4 in `nums2` exist in `nums1`. So `answer2` is 4.

PROGRAM:-

```
def count_common_indices(nums1, nums2):
```

```
    set_nums2 = set(nums2)
```

```
    set_nums1 = set(nums1)
```

```
    answer1 = sum(1 for num in nums1 if num in set_nums2)
```

```
    answer2 = sum(1 for num in nums2 if num in set_nums1)
```

```
    return [answer1, answer2]
```

```
# Example 1
```

```
nums1_1 = [2, 3, 2]
```

```
nums2_1 = [1, 2]
```

```
output1 = count_common_indices(nums1_1, nums2_1)
```

```
print(f"Input: nums1 = {nums1_1}, nums2 = {nums2_1}\nOutput: {output1}")
```

```
# Example 2
```

```
nums1_2 = [4, 3, 2, 3, 1]
```

```
nums2_2 = [2, 2, 5, 2, 3, 6]
```

```
output2 = count_common_indices(nums1_2, nums2_2)
```

```
print(f"Input: nums1 = {nums1_2}, nums2 = {nums2_2}\nOutput: {output2}")
```

OUTPUT:-

```
Input: nums1 = [2, 3, 2], nums2 = [1, 2]
Output: [2, 1]
Input: nums1 = [4, 3, 2, 3, 1], nums2 = [2, 2, 5, 2, 3, 6]
Output: [3, 4]

=== Code Execution Successful ===
```

TIME COMPLEXITY:- $O(n)$