Problem 1636: Sort Array by Increasing Frequency

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Given an array of integers

nums

, sort the array in

increasing

order based on the frequency of the values. If multiple values have the same frequency, sort them in

decreasing

order.

Return the

sorted array

.

Example 1:

Input:

nums = [1,1,2,2,2,3]

Output:

[3,1,1,2,2,2]

Explanation:

'3' has a frequency of 1, '1' has a frequency of 2, and '2' has a frequency of 3.

Example 2:

Input:

nums = [2,3,1,3,2]

Output:

[1,3,3,2,2]

Explanation:

'2' and '3' both have a frequency of 2, so they are sorted in decreasing order.

Example 3:

Input:

nums = [-1,1,-6,4,5,-6,1,4,1]

Output:

[5,-1,4,4,-6,-6,1,1,1]

Constraints:

1 <= nums.length <= 100

-100 <= nums[i] <= 100

Code Snippets

C++:

```
class Solution {
public:
vector<int> frequencySort(vector<int>& nums) {

}
};
```

Java:

```
class Solution {
public int[] frequencySort(int[] nums) {

}
}
```

Python3:

```
class Solution:
def frequencySort(self, nums: List[int]) -> List[int]:
```

Python:

```
class Solution(object):
def frequencySort(self, nums):
"""
:type nums: List[int]
:rtype: List[int]
"""
```

JavaScript:

```
/**
* @param {number[]} nums
* @return {number[]}
*/
var frequencySort = function(nums) {
```

```
};
```

TypeScript:

```
function frequencySort(nums: number[]): number[] {

};
```

C#:

```
public class Solution {
public int[] FrequencySort(int[] nums) {

}
}
```

C:

```
/**
* Note: The returned array must be malloced, assume caller calls free().
*/
int* frequencySort(int* nums, int numsSize, int* returnSize) {

}
```

Go:

```
func frequencySort(nums []int) []int {

}
```

Kotlin:

```
class Solution {
fun frequencySort(nums: IntArray): IntArray {

}
}
```

Swift:

```
class Solution {
func frequencySort(_ nums: [Int]) -> [Int] {

}
}
```

Rust:

```
impl Solution {
pub fn frequency_sort(nums: Vec<i32>) -> Vec<i32> {

}
}
```

Ruby:

```
# @param {Integer[]} nums
# @return {Integer[]}
def frequency_sort(nums)

end
```

PHP:

```
class Solution {

/**
* @param Integer[] $nums
* @return Integer[]
*/
function frequencySort($nums) {

}
}
```

Dart:

```
class Solution {
List<int> frequencySort(List<int> nums) {

}
}
```

Scala:

```
object Solution {
def frequencySort(nums: Array[Int]): Array[Int] = {

}
}
```

Elixir:

```
defmodule Solution do
@spec frequency_sort(nums :: [integer]) :: [integer]
def frequency_sort(nums) do

end
end
```

Erlang:

```
-spec frequency_sort(Nums :: [integer()]) -> [integer()].
frequency_sort(Nums) ->
.
```

Racket:

```
(define/contract (frequency-sort nums)
(-> (listof exact-integer?) (listof exact-integer?))
)
```

Solutions

C++ Solution:

```
/*
* Problem: Sort Array by Increasing Frequency
* Difficulty: Easy
* Tags: array, hash, sort
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/
```

```
class Solution {
public:
vector<int> frequencySort(vector<int>& nums) {

}
};
```

Java Solution:

```
/**
* Problem: Sort Array by Increasing Frequency
* Difficulty: Easy
* Tags: array, hash, sort
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/

class Solution {
public int[] frequencySort(int[] nums) {

}
}
```

Python3 Solution:

```
"""
Problem: Sort Array by Increasing Frequency
Difficulty: Easy
Tags: array, hash, sort

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

class Solution:
def frequencySort(self, nums: List[int]) -> List[int]:
# TODO: Implement optimized solution
```

```
pass
```

Python Solution:

```
class Solution(object):
def frequencySort(self, nums):
"""
:type nums: List[int]
:rtype: List[int]
"""
```

JavaScript Solution:

```
/**
* Problem: Sort Array by Increasing Frequency
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/**
* @param {number[]} nums
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TypeScript Solution:

```
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```

```
*/

function frequencySort(nums: number[]): number[] {

};
```

C# Solution:

```
/*
* Problem: Sort Array by Increasing Frequency
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/

public class Solution {
public int[] FrequencySort(int[] nums) {

}
}
```

C Solution:

```
/*
* Problem: Sort Array by Increasing Frequency
* Difficulty: Easy
* Tags: array, hash, sort
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/

/**
* Note: The returned array must be malloced, assume caller calls free().
*/
int* frequencySort(int* nums, int numsSize, int* returnSize) {
```

```
}
```

Go Solution:

```
// Problem: Sort Array by Increasing Frequency
// Difficulty: Easy
// Tags: array, hash, sort
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
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func frequencySort(nums []int) []int {

}
```

Kotlin Solution:

```
class Solution {
fun frequencySort(nums: IntArray): IntArray {

}
}
```

Swift Solution:

```
class Solution {
func frequencySort(_ nums: [Int]) -> [Int] {

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Rust Solution:

```
// Problem: Sort Array by Increasing Frequency
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// Approach: Use two pointers or sliding window technique
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```

```
impl Solution {
pub fn frequency_sort(nums: Vec<i32>) -> Vec<i32> {

}
}
```

Ruby Solution:

```
# @param {Integer[]} nums
# @return {Integer[]}
def frequency_sort(nums)

end
```

PHP Solution:

```
class Solution {

/**
* @param Integer[] $nums
* @return Integer[]
*/
function frequencySort($nums) {

}
}
```

Dart Solution:

```
class Solution {
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object Solution {
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