

Problem 47: Permutations II

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given a collection of numbers,

nums

, that might contain duplicates, return

all possible unique permutations

in any order

.

Example 1:

Input:

nums = [1,1,2]

Output:

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

Example 2:

Input:

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

Output:

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

Constraints:

```
1 <= nums.length <= 8
```

```
-10 <= nums[i] <= 10
```

Code Snippets

C++:

```
class Solution {
public:
vector<vector<int>> permuteUnique(vector<int>& nums) {
    }
};
```

Java:

```
class Solution {
public List<List<Integer>> permuteUnique(int[] nums) {
    }
}
```

Python3:

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

Python:

```
class Solution(object):
def permuteUnique(self, nums):
```

```
"""
:type nums: List[int]
:rtype: List[List[int]]
"""
```

JavaScript:

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

TypeScript:

```
function permuteUnique(nums: number[]): number[][] {
};
```

C#:

```
public class Solution {
public IList<IList<int>> PermuteUnique(int[] nums) {
}
```

C:

```
/**
 * Return an array of arrays of size *returnSize.
 * The sizes of the arrays are returned as *returnColumnSizes array.
 * Note: Both returned array and *columnSizes array must be malloced, assume
 caller calls free().
 */
int** permuteUnique(int* nums, int numsSize, int* returnSize, int**  
returnColumnSizes) {
}
```

Go:

```
func permuteUnique(nums []int) [][]int {  
  
}
```

Kotlin:

```
class Solution {  
    fun permuteUnique(nums: IntArray): List<List<Int>> {  
  
    }  
}
```

Swift:

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

Rust:

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

Ruby:

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

PHP:

```
class Solution {  
  
/**
```

```
* @param Integer[] $nums
* @return Integer[][][]
*/
function permuteUnique($nums) {
}

}
```

Dart:

```
class Solution {
List<List<int>> permuteUnique(List<int> nums) {
}

}
```

Scala:

```
object Solution {
def permuteUnique(nums: Array[Int]): List[List[Int]] = {
}

}
```

Elixir:

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

end
end
```

Erlang:

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

Racket:

```
(define/contract (permute-unique nums)
  (-> (listof exact-integer?) (listof (listof exact-integer?)))
)
```

Solutions

C++ Solution:

```
/*
 * Problem: Permutations II
 * Difficulty: Medium
 * Tags: array, sort
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

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

Java Solution:

```
/**
 * Problem: Permutations II
 * Difficulty: Medium
 * Tags: array, sort
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
    public List<List<Integer>> permuteUnique(int[ ] nums) {
}
```

```
}
```

Python3 Solution:

```
"""
Problem: Permutations II
Difficulty: Medium
Tags: array, sort

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:

    def permuteUnique(self, nums: List[int]) -> List[List[int]]:
        # TODO: Implement optimized solution
        pass
```

Python Solution:

```
class Solution(object):

    def permuteUnique(self, nums):
        """
        :type nums: List[int]
        :rtype: List[List[int]]
        """
```

JavaScript Solution:

```
/**
 * Problem: Permutations II
 * Difficulty: Medium
 * Tags: array, sort
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

/**
```

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

TypeScript Solution:

```
/** 
* Problem: Permutations II
* Difficulty: Medium
* Tags: array, sort
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
function permuteUnique(nums: number[]): number[][] {  
};
```

C# Solution:

```
/*
* Problem: Permutations II
* Difficulty: Medium
* Tags: array, sort
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
public class Solution {
    public IList<IList<int>> PermuteUnique(int[] nums) {
        return null;
    }
}
```

C Solution:

```
/*
 * Problem: Permutations II
 * Difficulty: Medium
 * Tags: array, sort
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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 */

/**
 * Return an array of arrays of size *returnSize.
 * The sizes of the arrays are returned as *returnColumnSizes array.
 * Note: Both returned array and *columnSizes array must be malloced, assume
 caller calls free().
 */
int** permuteUnique(int* nums, int numsSize, int* returnSize, int** returnColumnSizes) {

}
```

Go Solution:

```
// Problem: Permutations II
// Difficulty: Medium
// Tags: array, sort
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func permuteUnique(nums []int) [][]int {

}
```

Kotlin Solution:

```
class Solution {
    fun permuteUnique(nums: IntArray): List<List<Int>> {
}
```

}

Swift Solution:

```
class Solution {
    func permuteUnique(_ nums: [Int]) -> [[Int]] {
        ...
    }
}
```

Rust Solution:

```
// Problem: Permutations II
// Difficulty: Medium
// Tags: array, sort
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

impl Solution {
    pub fn permute_unique(nums: Vec<i32>) -> Vec<Vec<i32>> {
        }

        }
}
```

Ruby Solution:

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

PHP Solution:

```
class Solution {  
  
    /**  
     * @param Integer[] $nums  
     * @return Integer[][]
```

```
*/  
function permuteUnique($nums) {  
  
}  
}  
}
```

Dart Solution:

```
class Solution {  
List<List<int>> permuteUnique(List<int> nums) {  
  
}  
}  
}
```

Scala Solution:

```
object Solution {  
def permuteUnique(nums: Array[Int]): List[List[Int]] = {  
  
}  
}
```

Elixir Solution:

```
defmodule Solution do  
@spec permute_unique(nums :: [integer]) :: [[integer]]  
def permute_unique(nums) do  
  
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-spec permute_unique(Nums :: [integer()]) -> [[integer()]].  
permute_unique(Nums) ->  
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(define/contract (permute-unique nums)  
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