

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)
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 */

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
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 * Approach: Use two pointers or sliding window technique
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 */

/**
```

```

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

};

```

TypeScript Solution:

```

/**
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 * Difficulty: Medium
 * Tags: array, sort
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 */

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

};

```

C# Solution:

```

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 * 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) {

    }
}

```


C Solution:

```
/*
 * Problem: Permutations II
 * Difficulty: Medium
 * Tags: array, sort
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/**
 * Return an array of arrays of size *returnSize.
 * The sizes of the arrays are returned as *returnColumnSizes array.
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 caller calls free().
 */
int** permuteUnique(int* nums, int numsSize, int* returnSize, int**
returnColumnSizes) {

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Go Solution:

```
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// 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:

```
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// Difficulty: Medium  
// Tags: array, sort  
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// Approach: Use two pointers or sliding window technique  
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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) {

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Scala Solution:

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object Solution {
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