

Problem 1313: Decompress Run-Length Encoded List

Problem Information

Difficulty: Easy

Acceptance Rate: 86.13%

Paid Only: No

Tags: Array

Problem Description

We are given a list `nums` of integers representing a list compressed with run-length encoding.

Consider each adjacent pair of elements `[freq, val] = [nums[2*i], nums[2*i+1]]` (with `i >= 0`). For each such pair, there are `freq` elements with value `val` concatenated in a sublist. Concatenate all the sublists from left to right to generate the decompressed list.

Return the decompressed list.

Example 1:

Input: `nums = [1,2,3,4]` **Output:** `[2,4,4,4]` **Explanation:** The first pair `[1,2]` means we have `freq = 1` and `val = 2` so we generate the array `[2]`. The second pair `[3,4]` means we have `freq = 3` and `val = 4` so we generate `[4,4,4]`. At the end the concatenation `[2] + [4,4,4]` is `[2,4,4,4]`.

Example 2:

Input: `nums = [1,1,2,3]` **Output:** `[1,3,3]`

Constraints:

`2 <= nums.length <= 100` `nums.length % 2 == 0` `1 <= nums[i] <= 100`

Code Snippets

C++:

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

Java:

```
class Solution {  
    public int[] decompressRLElist(int[] nums) {  
  
    }  
}
```

Python3:

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