

# 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]:
```