


1470. Shuffle the Array

▼ Link to problem on leetcode.

Shuffle the Array - LeetCode

Can you solve this real interview question? Shuffle the Array
- Given the array nums consisting of 2n elements in the form $[x_1, x_2, \dots, x_n, y_1, y_2, \dots, y_n]$. Return the array in the form

 <https://leetcode.com/problems/shuffle-the-array/description/>



Problem Statement: Given the array `nums` consisting of `2n` elements in the form $[x_1, x_2, \dots, x_n, y_1, y_2, \dots, y_n]$. Return the array in the form $[x_1, y_1, x_2, y_2, \dots, x_n, y_n]$.

Solution in C:

```
int* shuffle(int* nums, int numsSize, int n, int* returnSize){
    int i = 0, j = n, k = 0;
    if(n >= 0 && n <= 500) {
        int *retArr = (int*)malloc((2 * n + 1) * sizeof(int));
        while(i < n && j < numsSize) {
            if(k%2 == 0) {
                retArr[k++] = nums[i++];
            } else {
                retArr[k++] = nums[j++];
            }
        }
        retArr[k] = nums[numsSize-1];
        *returnSize = 2*n;
        return retArr;
    }
    *returnSize = 0;
    return NULL;
}
```

Solution in Java:

```
class Solution {
    public int[] shuffle(int[] nums, int n) {
        int i = 0, j = n, k = 0;
        int[] retArr = new int[2 * n];
        while(i < n) {
            if(k % 2 == 0) {
                retArr[k++] = nums[i++];
            }
        }
    }
}
```

```
        } else {
            retArr[k++] = nums[j++];
        }
    }
    retArr[k] = nums[nums.length - 1];
    return retArr;
}
}
```