

E - 1470. 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 $[x_1, y_1, x_2, y_2, \dots, x_n, y_n]$.

Example 1:

Input: `nums = [2,5,1,3,4,7]`, `n = 3`

Output: `[2,3,5,4,1,7]`

Explanation: Since $x_1=2$, $x_2=5$, $x_3=1$, $y_1=3$, $y_2=4$, $y_3=7$ then the answer is `[2,3,5,4,1,7]`.

Example 2:

Input: `nums = [1,2,3,4,4,3,2,1]`, `n = 4`

Output: `[1,4,2,3,3,2,4,1]`

Example 3:

Input: `nums = [1,1,2,2]`, `n = 2`

Output: `[1,2,1,2]`

Constraints:

$1 \leq n \leq 500$

`nums.length == 2n`

$1 \leq \text{nums}[i] \leq 10^3$

Solution:

```
class Solution {
    public int[] shuffle(int[] nums, int n) {
        int[] result = new int[2*n];
        int idx=0;
        for(int i=0;i<n;i++){
            result[idx++]=nums[i];
            result[idx++]=nums[i+n];
        }
        return result;
    }
}
```