

# Shuffle integers

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Given an array of  $n$  elements in the following format  $\{ a_1, a_2, a_3, a_4, \dots, a_{n/2}, b_1, b_2, b_3, b_4, \dots, b_{n/2} \}$ . The task is shuffle the array to  $\{a_1, b_1, a_2, b_2, a_3, b_3, \dots, a_{n/2}, b_{n/2}\}$  without using extra space.

## Input:

The first line of input contains an integer  $T$  denoting the number of test cases. Then  $T$  test cases follow, Each test case contains an integer  $n$  denoting the size of the array. The next line contains  $n$  space separated integers forming the array.

## Output:

Print the shuffled array without using extra space.

## Constraints:

$$1 \leq T \leq 10^5$$

$$1 \leq n \leq 10^5$$

$$1 \leq a[i] \leq 10^5$$

## Example:

### Input:

2

4

1 2 9 15

6

1 2 3 4 5 6

### Output:

1 9 2 15

1 4 2 5 3 6