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## Array Pair Sum

Given an integer array `nums` of  $2n$  integer elements, Group these elements into  $n$  pairs  $(a_1, b_1)$ ,  $(a_2, b_2)$ , ...,  $(a_n, b_n)$  such that the sum of  $\min(a_i, b_i)$  for all  $i$  is maximized.

### Input:

The first line is an integer, indicates size of the array.

Second line is the integer elements of the array.

### Output:

Print maximized sum.

### Constraints:

- $1 \leq n \leq 10^4$
- `nums.length == 2 * n`
- $-10^4 \leq \text{nums}[i] \leq 10^4$

### Sample:

No.	Sample Input	Sample Output
1	4 1 4 3 2	max_sum: 4
2	6 6 2 6 5 1 2	max_sum: 9
3	6 -2 -5 2 0 4 1	max_sum: -3