Matching Sets

Consider two n-element multisets (i.e., unordered and possibly containing duplicate elements) of integers, $X = \{x_0, x_1, \ldots, x_{n-1}\}$ and $Y = \{y_0, y_1, \ldots, y_{n-1}\}$. You can perform the following operation on set X:

1. Choose two elements at some postions x_i and x_j where $0 \leq i, j < n$ and $i \neq j$.
2. Decrement x_i by 1 and increment x_j by 1.

Given X and Y, find and print the minimum number of operations you must perform so that X is equal to Y (i.e., both sets contain the same exact values, and the order doesn't matter); if such a thing is not possible, print -1 instead.

Input Format

The first line contains a single integer, n.
The second line contains n space-separated integers describing the respective values of set X.
The third line contains n space-separated integers describing the respective values of set Y.

Constraints

- $1 \leq n \leq 10^5$
- $-10^9 \leq x_i, y_i \leq 10^9$, where $0 \leq i < n$.
- $n \leq 50$ for at least 50% of the test cases.

Output Format

Print a single integer denoting the minimum number of operations required to make set X equal to set Y; if no number of operations will ever make the two sets equal, print -1 instead.

Sample Input 0

```
3
1 2 3
-1 4 3
```

Sample Output 0

```
2
```

Explanation 0
In this example, we perform two operations:

1. $\mathbf{1, 2, 3} \rightarrow \mathbf{0, 3, 3}$
2. $\mathbf{0, 3, 3} \rightarrow \mathbf{-1, 4, 3}$

Sample Input 1

```
3
1 2 3
2 3 2
```

Sample Output 1

```
-1
```

Explanation 1

Because no amount of operations will result in sets X and Y being equal, we print -1.