

Go Stone Puzzle: Problem Overview

Problem Statement:

There are $N+2$ cells arranged in a row. Let cell i denote the i -th cell from the left. There is one stone placed in each of the cells from cell 1 to cell N . For each $1 \leq i \leq N$, the stone i is white if S_i is W , and black if S_i is B . Cells $N+1$ and $N+2$ are empty.

You can perform the following operation any number of times (possibly zero):

- Choose a pair of adjacent cells that both contain stones and move these two stones to the empty two adjacent cells while preserving their order.

Objective:

Determine if it is possible to achieve the following state, and if so, find the minimum number of operations required.

Go Stone Puzzle: Input and Output(2)

Sample Input 2:

```
6
BBBBBB
WWWWWW
```

Sample Output 2:

```
-1
```

Sample Input 3:

```
14
BBBWBWWBBWBBW
WBWWBBWBBWBBB
```

Sample Output 3:

```
7
```

Constraints:

- $2 \leq N \leq 14$
- N is an integer.
Each of S and T is a string of length N consisting of **B** and **W**.

Go Stone Puzzle: Input and Output(1)

Input:

The input is given from Standard Input in the following format:

```
N
S
T
```

Output:

If it is possible to achieve the desired state, print the minimum number of operations required. If it is impossible, print -1.

Sample Input 1:

```
6
BWBWBW
WWBBBB
```

Sample Output 1:

```
4
```