The Contest Contest 1 P1 - A Typical Codeforces Problem

Time limit: 1.0s **Memory limit:** 256M

You just came up with a problem to put on a rated contest! You've invited N testers to test the problem, numbered from 1 to N, each of whom will attempt the problem and then vote either `YES` or `NO`. In order for the problem to be approved, a **majority** (strictly greater than half) of the testers must vote `YES`. You already know how each tester will vote, but it may not be a majority.

However, you have a few tricks up your sleeve. In one move, you can select an interval $[l, r]$. Let c be the number of testers in that interval that vote `YES`. Then, you can change the vote of tester c to `YES`. Determine if you are able to force a majority of the testers to vote `YES` after making any number (possibly zero) of moves.

Constraints

$2 \leq N \leq 10^6$

Input Specification

The first line of input contains a single integer N, the number of testers.

The second line contains a string of length N consisting of `Y` or `N` characters. The i^{th} character is `Y` if the i^{th} tester votes `YES` and `N` if the i^{th} tester votes `NO`.

Output Specification

Output `YES` if you're able to force a majority of the testers to vote `YES`.

Otherwise, output `NO`.

Sample Input 1

```
4
YNNY
```

Sample Output 1

```
YES
```

Explanation for Sample 1

On the first move, we can select the interval $[1, 4]$ to get $c = 2$ and force tester 2 to vote `YES`.

The votes are now `YYNY`, which is a majority.

Sample Input 2

```
5
NYNNN
```

Sample Output 2

```
NO
```

Explanation for Sample 2

There are no sequences of moves that result in a majority of the testers voting `YES`.

Sample Input 3

```
3
YYN
```

Sample Output 3

```
YES
```

Explanation for Sample 3

A majority of the testers already vote `YES`, so no moves are necessary.