Yet Another Palindrome Making Problem

Problem Code: MAKEP

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Chef has a string A (containing lowercase Latin letters only) of length N where N is **even**. He can perform the following operation any number of times:

- Swap A_i and A_{i+2} for any $1 \leq i \leq (N-2)$

Determine if Chef can convert string A to a palindromic string.

Note: A string is called a palindrome if it reads the same backwards and forwards. For example, `noon` and `level` are palindromic strings but `ebb` is not.

Input Format

- The first line contains a single integer T — the number of test cases. Then the test cases follow.
- The first line of each test case contains an integer N — the length of the string A.
- The second line of each test case contains a string A of length N containing lowercase Latin letters only.

Output Format

For each test case, output `YES` if Chef can convert the string A to a palindromic string. Otherwise, output `NO`.

You may print each character of `YES` and `NO` in either uppercase or lowercase (for example, `yes`, `yEs`, `Yes` will be considered identical).

Constraints

- $1 \leq T \leq 200$
- $1 \leq N \leq 1000$
- S contains lowercase Latin letters only.
- N is even

Sample Input 1

```
3
6
aabbaa
4
abcd
6
zzxyyx
```

Sample Output 1

```
YES
NO
YES
```

Explanation

Test case 1: The given string is already a palindrome.

Test case 2: It can be proven that is it not possible to convert A to a palindromic string.

Test case 3: We can perform the following operations:

- Swap A_1 and A_3. (Now A becomes xzzyyx)
- Swap A_2 and A_4. (Now A becomes xyzzyx)

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