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# 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).

## Submission

24

Min

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## 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
aabbbaa
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 it is 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 xzyzyx)

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Time Limit: 0.5 secs

Source Limit: 50000 Bytes

Languages: CPP17, PYTH 3.6, JAVA, C, CPP14, PYTH, PYP3, CS2, ADA, PYPY, TEXT, PAS fpc, NODEJS, RUBY, PHP, GO, HASK, TCL, kotlin, PERL, SCALA, LUA, BASH, JS, rust, LISP sbcl, PAS gpc, BF, CLOJ, R, D, CAML, swift, FORT, ASM, FS, WSPC, LISP clisp, SQL,