Palindrome Or Not

It's English class now. So John is bored as usual. To get over his boredom he is doing a very strange thing. He writes an arbitrary string on his notebook and then keeps changing a single character of the string every time and tries to find out if the string has become a palindrome.

As John is very smart this task is very simple for him.

But how simple is it for you ? Can you be as smart as the great John?

You'll have to write a code that solves the similar problem and hopefully as fast as John.

INPUT:

First line of the input will be an integer T (T<=15) denoting number of test cases.

Each test case starts with an integer N (1<=N<=100000) denoting the length of the string.

Next line will contain the string consisting of only small letters of English alphabet (a,b,c,...,x,y,z).

Then there will be another integer M (1<=M<=10000) denoting number of queries.

Each query will be in the form: i x

where i will be an integer (1<=i<=N) and x will be a character. (a<= x<=z)

and it will mean that the i-th character of the string has been changed to x.

OUTPUT:

First you will have to print the test case number.

Then for each query in the test case you will have to print "YES" if the given string has become a plaindrome. Otherwise print "NO". (without the quotes)

See sample input/output and expalination for details.

Sample Input	Sample output
1	Case 1:
11	YES
madamimadam	NO
6	NO
6 z	NO
1 a	NO
11 b	YES
5 z	
1 b	
7 z	

Explaination:

After the 1st query the string is: madamzmadam

which is a palindrome

After the 2nd query the string is: aadamzmadam

which is **NOT** a palindrome

After the 3rd query the string is: aadamzmadab

which is **NOT** a palindrome

After the 4th query the string is: aadazzmadab

which is **NOT** a palindrome

After the 5th query the string is: badazzmadab

which is **NOT** a palindrome

After the 6th query the string is: badazzzadab

which is a palindrome