Problem K

Martin's expedition to the Iron Mountains turned out to be quite fruitful and yielded a treasure trove of ancient magical texts and powerful magical artifacts. While analysing this mountain of resources, you stumbled upon a somewhat surprising find.

"Snake Sign – Miracle Mirage Mirror!" you shouted, demonstrating your newest discovery in battle magic – a spell that employs alliterations to stun and defeat the enemy!

Initial trials have demonstrated that the spell is highly effective in confusing goblins and disrupting the enemy's formation, allowing your forces penetrate their front line. You are thus very eager to teach this spell to all the recruited mages that are to enter battle soon.

However, first you wonder: are there more powerful spells like these?

Formally an X, Y**-Alliteration Spell** is a string made by concatenating 5 words where the first 2 words share the first X or more characters, and the last 3 words share the first Y or more characters. For example, the spell you just demonstrated is a **1,3-Alliteration Spell**.

Since the ancient text that you found these spells in contains many dud spells as well, you would like to determine if a string is an X, Y**-Alliteration Spell** quickly – without actually casting each of them and observing their (possibly dangerous) effects.

Input

The first line contains a single integer T, the number of test cases.

Each test case begins with a line containing two integers, $1 \leq X, Y \leq 100,000$, followed by a line containing a string made of uppercase English letters, S $(1 \leq |S| \leq 100,000)$,

Output

For each test case, output "Yes" if the given string is an X, Y-Alliteration Spell and output "No" otherwise.

Sample Input

```
6
1 3
SNAKESIGNMIRACLEMIRAGEMIRROR
1 4
SNAKESIGNMIRACLEMIRAGEMIRROR
1 1
AAAA
1 1
AAAAA
3 6
GHBFCEEEEEEEEEEEEEEEEEEEEEEEEEEEEGGEBEEEE
2 9
CCCCCCCABCCDBCCCCCCCCCCCCCCCEEACCCCCCCCCCCCCABCCDBCCCCBAEABBDEECCCCCCCCCABCCDBCCCCACC
```

Sample Output

```
Yes
No
No
Yes
No
Yes
```