Competitive Programming SS24

Submit until end of contest

Problem: casting (3.0 second timelimit)

Today at Hogwarts Professor McGonagall will teach you a new transmutation spell. For training purposes she arranged some magical blocks in a line. They are colored black and white. Furthermore they have the peculiar property of changing their color, when hit with this new spell.

Professor McGonagall now poses the task to turn all of them into the same color to you. This would be quite easy for you if you would just manage to hit all of them individually. However, you always hit two adjacent blocks at once.

Now you ask yourself whether its possible for you to solve this task, without needing to aim better and if so, what could be a strategy. You are satisfied with any solution you don't necessarily want the shortest one.

Input In the first line is a number t ($1 \leq t \leq 10^5$) which gives you the number of task you have to solve.

In the first line of each task is a number n ($1 \leq n \leq 10^5$) which states the number of blocks. In the second line there are n characters, which are either '`B`' or '`W`', indicating the initial color of all blocks.

The sum overall n does not exceed 10^5 ($\sum_{i=1}^{t} n_i \leq 10^5$).

Output For each testcase decide whether or not you can complete the task. Output "`YES`" or "`NO`" giving your judgement. If the answer is "`YES`" you have to output a sequence of moves which turn the initial sequence monochromatic.

In the next line give a number k describing the number of spells you intend to use. On the next line give k numbers a_i ($1 \leq a_i < n$) describing the block with the lower index you want to hit with the i^{th} spell.

The sum over all k may not exceed $3 \cdot 10^5$.

Sample input

```
3
2
BW
4
WWWW
3
BWB
```

Sample output

```
NO
YES
0

YES
2
1 2
```