
Problem A. Omnipotent . . . Garland

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **256 megabytes**

Rikka finally fell asleep on the top of the lunar tower. She dreamed about LCR’s unique garland which she had always treated with great interest. The garland is made of n flowers of two types: *Bauhinia Blakeana* and *Cerasus Yedoensis*. For convenience, we use abbreviations to call them “B” and “C”. The n flowers form a ring, that is, each flower has an integer index in $[0, n)$ such that the flowers i and $((i + 1) \bmod n)$ are adjacent.

Rikka has chosen two magic positive integers m, k . Now she wants to divide the garland into m shorter ones such that the length of each sub-garland is a multiple of k , flowers in each sub-garland keep in order as they used to be in the garland, and there exist two distinct “B”s in each sub-garland that are adjacent. You need to answer if there exist valid partitions, and if so, output any of them.

Formally, let $t[i]$ ($i = 0, 1, \dots, n - 1$) be the type of the flower with index i (either “B” or “C”). A sub-garland containing c flowers can be described as an ascending sequence $A = \{A_0, A_1, \dots, A_{c-1}\}$ ($A_i < A_{i+1}, i = 0, 1, \dots, c - 2$), which represents the indices in the original garland of those flowers. We also regard A as the set of all items in the sequence A . Rikka wants to find m sequences S_1, S_2, \dots, S_m such that $\cup_{i=1}^m S_i = \{0, 1, \dots, n - 1\}$, $\sum_{i=1}^m |S_i| = n$, and for $i = 1, 2, \dots, m$, $|S_i|$ is a multiple of k and there exists x, y ($x, y \in \mathbb{Z}$) meeting the conditions:

- $0 \leq x, y < |S_i|$
- $x \neq y$
- $x \equiv (y + 1) \pmod{|S_i|}$
- $t[S_{ix}] = t[S_{iy}] = \text{“B”}$

Input

The first line contains an integer T ($1 \leq T \leq 10^5$), the number of test cases. Then T test cases follow.

The input format of each test case is as follows:

The first line contains three integers n, m, k ($1 \leq n, m, k \leq 10^6$), the length of the garland, the number of sub-garlands and the factor of sub-garlands’ lengths.

The second line contains a string t of length n , where the i -th character is either “B” or “C”, representing $t[i]$ ($i = 0, 1, \dots, n - 1$), the type of the flower i .

It is guaranteed that the sum of n in all test cases is at most 10^6 .

Output

Answer each test case in order. For each test case, the output format is as follows:

The first line contains a string “Yes” or “No” (without the quotation marks). Output “Yes” if there exists a valid partition, or “No” otherwise.

If the answer is “Yes”, output the sub-garlands in the following m lines. In each line, the first integer is the length of that sub-garland $|S_i|$. The following $|S_i|$ integers are the indices in the original garland of the flowers in it, in ascending order.

Example

standard input	standard output
4	Yes
6 2 2	2 0 1
BCCBB	4 2 3 4 5
6 2 3	Yes
BCCBB	3 0 1 2
4 4 1	3 3 4 5
BBBB	No
12 2 3	Yes
BCCBCCBCCC	6 0 1 2 3 5 6
	6 4 7 8 9 10 11