Anagram Strings

Description

Earthworm likes to crawling on a string, especially a string full of English letters. Sometimes, he pickup some distinct letters while he get through on it. One day Earthworm wondered, "Can I find all possible distinct letter sequences when I crawling on this string?"

Please help Earthworm to check if this string is a good string of level k or not. For a fixed positive integer k, the given string is considered as "good of level k" by Earthworm if for each possible permutation of first k English letters, he can find such subsequence from this string.

Input

There is an integer in the first line, indicating the number of test cases. For each test case there is an integer k and a string S. The string consists only lowercase letters.

- $1 \leq T \leq 100$
- $1 \leq k \leq 16$
- $1 \leq |S| \leq 1000$.

Output

For each test case:

- If the string is a good string of level k, output `Yes`.
- If for any positive integer l, the string is not a good string of level l, output `No 0`.
- Otherwise, output `No $l$` where l is the largest positive integer that makes the string good of level l.

Sample Input

```
7
2 abab
2 bbbaa
3 abcabca
3 abcabcabc
5 shikpipitmt
4 abcabca
3 earthworm
```

Sample Output

```
Yes
No 1
Yes
Yes
No 0
No 3
No 1
```