

You are given a string 'S' of length 'N' consisting of lowercase English alphabet letters. You are also given a positive integer K.

Now, a substring of this string is good if contains at most K distinct characters. For example:

For S = "abac" and K = 3, one of the good substrings will be "aba" as it contains only two distinct characters.

Your task is to return the maximum size of any good substring of the string S.

**Note:** A string X is a substring of string Y if it can be obtained by deletion of several elements(possibly zero) from the beginning and the end from the string Y.

#### Input Format:

The first line of input contains an integer 'T' denoting the number of test cases to run. Then the test case follows.

The first line of each test case contains a single integer 'K', denoting the maximum number of distinct characters.

The second line of each test case contains a string S

#### Output Format:

For each test case, print the length of the longest substring that contains at most K distinct characters.

Output for every test case will be printed in a separate line.

**Note:** You do not need to print anything; it has already been taken care of. Just implement the given function.

#### Constraints:

1 <= T <= 10  
1 <= K <= 26  
1 <= N <= 10<sup>4</sup>

All the characters of the string will lowercase English alphabet letters.

Time Limit: 1sec

**Sample Input 1:**

```
2
2
abcbc
1
abccc
```

**Sample Output 1:**

```
4
3
```

**Explanation Of The Sample 1:**

Test Case 1:  $K = 2$ , so we can choose substring 'bcbc' having 2 distinct character which is less than or equal to  $K = 2$ .

We cannot get any other substring of length 5 or more having distinct characters less than or equal to 2.

Test Case 2:  $K = 1$ , so we can choose substring 'ccc' having only 1 distinct character which is less than or equal to  $K = 1$ .

We cannot get any other substring of length 4 or more having distinct characters less than or equal to 1.

**Sample Input 2:**

```
1
6
abcba
```

**Sample Output 2:**

```
5
```