

Loose Subsequences

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 512 megabytes

Given a string S of length n consisting only of lowercase letters, the following conventions are established.

- Subsequence: A sequence formed by extracting several elements (not necessarily consecutive) from S without changing their relative positions is called a subsequence.
- A k -loose subsequence: If any two adjacent characters in a subsequence of S are at least k positions apart in the original string S , then this subsequence is called a k -loose subsequence of S . Specifically, for a subsequence $T = S_{pos_1}S_{pos_2} \cdots S_{pos_m}$ of S of length m , T is a k -loose subsequence of S if and only if $\forall i \in [1, m - 1], pos_{i+1} - pos_i > k$.

Now, given a non-negative integer k , you need to calculate the number of distinct non-empty k -loose subsequences of S , and output the result modulo 998244353.

Two subsequences A and B of S are considered different if and only if $|A| \neq |B|$ or there exists an index i such that $A_i \neq B_i$.

Input

The first line contains an integer T ($1 \leq T \leq 10^6$), representing the number of test cases.

For each test case, the first line contains two integers n, k ($1 \leq n \leq 10^6, 0 \leq k \leq n$), as described in the problem statement.

The second line contains a string S of length n , guaranteed to consist only of lowercase letters.

It is guaranteed that for all test cases, $\sum n \leq 10^6$.

Output

For each test case, output a single integer on a new line, representing the number of distinct non-empty k -loose subsequences of S , modulo 998244353.

Example

standard input	standard output
3	3
4 1	6
aabb	10
5 2	
abcab	
7 3	
abcdece	

Note

For the first test case, the subsequences **a**, **b**, **ab** meet the requirements.

For the second test case, the subsequences **a**, **b**, **c**, **aa**, **ab**, **bb** meet the requirements.