Hyper Strings

Problem Statement

String A is called a *Super String* if and only if:

- A contains only letters a, b, c, d, e, f, g, h, i, and j;
- For any i and j, $A[i]$ has lower ascii code than $A[j]$, where $0 < i < j <$ *length(A)*

Given a set of Super Strings H, a *Hyper String* is a string that can be constructed by concatenation of some Super Strings of the set H. We can use each Super String as many times as we want.

Given set H, you have to compute the number of Hyper Strings with length no greater than M.

Input Format

The first line of input contains two integers, N (the number of Super Strings in H) and M.
The next N lines describe the Super Strings in set H.
N and M are not greater than 100.

Output Format

Output an integer which is the number of possible Hyper Strings that can be derived. Since it may not fit in 32bit integer, print the output module 1000000007. (i.e. answer = answer % 1000000007)

Sample Input

2 3
a
ab

Sample Output

7

Explanation

In the example all the Hyper Strings are : "" (a string with no characters), "a", "ab", "aa", "aaa", "aba", and "aab".