

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

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

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***.

Constraints

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 **32** bit 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 : "" (empty string), "***a***", "***ab***", "***aa***", "***aaa***", "***aba***", and "***aab***".