C. Levko and Strings

time limit per test: 1 second memory limit per test: 256 megabytes

input: standard input output: standard output

Levko loves strings of length n, consisting of lowercase English letters, very much. He has one such string s. For each string t of length n, Levko defines its beauty relative to s as the number of pairs of indexes i, j ($1 \le i \le j \le n$), such that substring t[i..j] is lexicographically larger than substring s[i..j].

The boy wondered how many strings t are there, such that their beauty relative to s equals exactly k. Help him, find the remainder after division this number by $1000000007 (10^9 + 7)$.

A substring s[i..j] of string $s = s_1 s_2 ... s_n$ is string $s_i s_{i+1} ... s_j$.

String $x = x_1x_2...x_p$ is lexicographically larger than string $y = y_1y_2...y_p$, if there is such number r (r < p), that $x_1 = y_1, x_2 = y_2, ..., x_r = y_r$ and $x_{r+1} > y_{r+1}$. The string characters are compared by their ASCII codes.

Input

The first line contains two integers n and k ($1 \le n \le 2000$, $0 \le k \le 2000$).

The second line contains a non-empty string s of length n. String s consists only of lowercase English letters.

Output

Print a single number — the answer to the problem modulo $100000007 (10^9 + 7)$.

Examples

input	
2 2	
yz	
output	

input
2 3
yx
output
2

input	
4 7 abcd	
abcd	
output	
21962	