

E. 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 ($1 \leq i \leq j \leq n$), 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 $s = s_1s_2...s_n$ is string $s_is_{i+1}...s_j$.

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 $x_1 = y_1, x_2 = y_2, \dots, x_r = y_r$ 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 ($1 \leq n \leq 2000, 0 \leq k \leq 2000$).

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 1000000007 ($10^9 + 7$).

Examples

input
2 2 yz
output
26

input
2 3 yx
output
2

input
4 7 abcd
output
21962