Distinct Subsequences

Given a string, count the number of distinct subsequences of it (including empty subsequence). For the uninformed, A subsequence of a string is a new string which is formed from the original string by deleting some of the characters without disturbing the relative positions of the remaining characters.
For example, "AGH" is a subsequence of "ABCDEFGH" while "AHG" is not.

Input

First line of input contains an integer T which is equal to the number of test cases. You are required to process all test cases. Each of next T lines contains a string s.

Output

Output consists of T lines. Ith line in the output corresponds to the number of distinct subsequences of ith input string. Since, this number could be very large, you need to output ans%1000000007 where ans is the number of distinct subsequences.

Example

Input:
3
AAA
ABCDEFG
CODECRAFT

Output:
4
128
496

Constraints and Limits

T ≤ 100, length(S) ≤ 100000
All input strings shall contain only uppercase letters.