

Practice Round APAC test 2017

A. Lazy Spelling Bee

B. Robot Rock Band

C. Not So Random

D. Sums of Sums

Questions asked

Submissions

Lazy Spelling Bee

5pt Not attempted 698/1266 users correct (55%)

8pt | Not attempted 496/685 users correct (72%)

Robot Rock Band

6pt Not attempted 480/622 users correct (77%)

14pt | Not attempted 142/407 users correct (35%)

Not So Random

11pt | Not attempted 204/310 users correct (66%)

20pt | Not attempted 109/158 users correct (69%)

Sums of Sums

8pt Not attempted 230/395 users correct (58%)

28pt Not attempted 13/128 users correct (10%)

Top Scores Jayam Seter

KillswitcherEngag	100
onepunchman	100
Sumeet.Varma	100
gdragon007	100
libenchao	100
jpravishAA	100
vaibhav227	100
wrong	100

Problem A. Lazy Spelling Bee

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the Quick-Start Guide to get started.

Small input

5 points

Large input 8 points

Solve A-small

Solve A-large

Problem

In the Lazy Spelling Bee, a contestant is given a target word W to spell. The contestant's answer word A is acceptable if it is the same length as the target word, and the i-th letter of A is either the i-th, (i-1)th, or (i+1)th letter of W, for all i in the range of the length of A. (The first letter of A must match either the first or second letter of W, since the 0th letter of W doesn't exist. Similarly, the last letter of A must match either the last or next-to-last letter of W.) Note that the target word itself is always an acceptable answer word.

You are preparing a Lazy Spelling Bee, and you have been asked to determine, for each target word, how many distinct acceptable answer words there are. Since this number may be very large, please output it modulo 1000000007 $(10^9 + 7).$

Input

The first line of the input gives the number of test cases, **T**. **T** test cases follow; each consists of one line with a string consisting only of lowercase English letters (a through z).

Output

For each test case, output one line containing "Case #x: y", where x is the test case number (starting from 1) and y is the number of distinct acceptable answer words, modulo $10^9 + 7$.

Limits

 $1 \le T \le 100$.

Small dataset

 $1 \le \text{length of each string} \le 5$.

Large dataset

 $1 \le \text{length of each string} \le 1000.$

Sample

100

100

Input	Output
4 ag aa abcde x	Case #1: 4 Case #2: 1 Case #3: 108 Case #4: 1

In sample case #1, the acceptable answer words are aa, ag, ga, and gg.

In sample case #2, the only acceptable answer word is aa.

