

Reg. No.:

Name:

Sl. No.:

Question: Müller tried to catch Stierlitz red-handed many times, but always failed because Stierlitz could ever find some excuse. Once Stierlitz was looking through his email messages. At that moment, Müller entered secretly and watched a meaningless sequence of symbols appear on the screen. "A coded message," Müller thought. "UTF-8," Stierlitz thought.

It is known that Stierlitz coded messages by the following method.

- He deletes all spaces and punctuation marks.
- He replaces all successive identical letters by one such letter.
- He inserts two identical letters at an arbitrary place many times.

Write a C program to regenerate the original message, which is coded using the above 3 methods.

Input

The first line of input contains number of test cases $t \leq 10000$.

The next input line for each test case contains a message coded by Stierlitz. The message consists of lowercase English letters and its length is at most 200000.

Output

Output the restored message

Example (input/output):

1.

Input:

3

wwstdaadierfflitzzz

ravi maggon

""hihiih

Output:

stierlitz

ravimaon

hihih

**** END ****