

A. CIPHER SHIFTER

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

There is a string a (unknown to you), consisting of lowercase Latin letters, encrypted according to the following rule into string s :

- after each character of string a , an arbitrary (possibly zero) number of any lowercase Latin letters, different from the character itself, is added;
- after each such addition, the character that we supplemented is added.

You are given string s , and you need to output the initial string a . In other words, you need to decrypt string s .

Note that each string encrypted in this way is decrypted **uniquely**.

Input

The first line of the input contains a single integer t ($1 \leq t \leq 1000$) — the number of test cases.

The descriptions of the test cases follow.

The first line of each test case contains a single integer n ($2 \leq n \leq 100$) — the length of the encrypted message.

The second line of each test case contains a string s of length n — the encrypted message obtained from some string a .

Output

For each test case, output the decrypted message a on a separate line.

Example

input	Copy
3 8 abacabac 5 qzxcq 20 ccooddeeffoorrcceess	
output	Copy
ac q codeforces	

Note

In the first encrypted message, the letter a is encrypted as aba , and the letter c is encrypted as $cabac$.

In the second encrypted message, only one letter q is encrypted as $qzxcq$.

In the third encrypted message, zero characters are added to each letter.

Codeforces Round 878 (Div. 3)

Finished

Practice



Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

Submit?

Language: GNU G++17 7.3.0

Choose file: Choose File No file chosen

Submit

Problem tags

implementation strings two pointers

*800

No tag edit access

Contest materials

- Announcement
- Tutorial

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