

Problem I. Short Substrings

Time limit 2000 ms

Mem limit 262144 kB

Alice guesses the strings that Bob made for her.

At first, Bob came up with the secret string a consisting of lowercase English letters. The string a has a length of 2 or more characters. Then, from string a he builds a new string b and offers Alice the string b so that she can guess the string a .

Bob builds b from a as follows: he writes all the substrings of length 2 of the string a in the order from left to right, and then joins them in the same order into the string b .

For example, if Bob came up with the string $a = "abac"$, then all the substrings of length 2 of the string a are: " ab ", " ba ", " ac ". Therefore, the string $b = "abbaac"$.

You are given the string b . Help Alice to guess the string a that Bob came up with. It is guaranteed that b was built according to the algorithm given above. It can be proved that the answer to the problem is unique.

Input

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

Each test case consists of one line in which the string b is written, consisting of lowercase English letters ($2 \leq |b| \leq 100$) — the string Bob came up with, where $|b|$ is the length of the string b . It is guaranteed that b was built according to the algorithm given above.

Output

Output t answers to test cases. Each answer is the secret string a , consisting of lowercase English letters, that Bob came up with.

Sample 1

Input	Output
4 abbaac ac bccddaaaf zzzzzzzzz	abac ac bcdaf zzzzzz

Note

The first test case is explained in the statement.

In the second test case, Bob came up with the string $a = "ac"$, the string a has a length 2, so the string b is equal to the string a .

In the third test case, Bob came up with the string $a = "bcdaaf"$, substrings of length 2 of string a are: "bc", "cd", "da", "af", so the string $b = "bccddaaaf"$.