Tag Content Extractor

In a tag-based language like *XML* or *HTML*, contents are enclosed between a *start tag* and an *end tag* like tag-contents</tag>. Note that the corresponding *end tag* starts with a /.

Given a string of text in a tag-based language, parse this text and retrieve the contents enclosed within sequences of well-organized tags meeting the following criterion:

- 1. The name of the *start* and *end* tags must be same. The HTML code <h1>Hello World</h2> is *not valid*, because the text starts with an h1 tag and ends with a non-matching h2 tag.
- 2. Tags can be nested, but content between nested tags is considered *not valid*. For example, in <h1> <a>contentsinvalid</h1>, contents is *valid* but invalid is *not valid*.
- 3. Tags can consist of any printable characters.

Input Format

The first line of input contains a single integer, N (the number of lines). The N subsequent lines each contain a line of text.

Constraints

- $1 \le N \le 100$
- ullet Each line contains a maximum of 10^4 printable characters.
- ullet The total number of characters in all test cases will not exceed 10^6 .

Output Format

For each line, print the content enclosed within valid tags.

If a line contains multiple instances of valid content, print out each instance of valid content on a new line; if no valid content is found, print None.

Sample Input

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- <h1>Nayeem loves counseling</h1>
- <h1><h1>Sanjay has no watch</h1></h1><par>So wait for a while</par>
- <Amee>safat codes like a ninja</amee>
- <SA premium>Imtiaz has a secret crush</SA premium>

Sample Output

Nayeem loves counseling Sanjay has no watch So wait for a while None Imtiaz has a secret crush