

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

- $1 \leq N \leq 100$
- Each line contains a maximum of 10^4 printable characters.
- 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

```
4
<h1>Nayeem loves counseling</h1>
<h1><h1>Sanjay has no watch</h1></h1><par>So wait for a while</par>
<Amees>safat codes like a ninja</amees>
<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