The Language of Time

As you sneak into the IEEE's headquarters, you hear a strange sound — Z-BWOMPH! In front of you appears a mysterious device. A door opens up and out comes two men: one wearing a robe and slippers, the other a scowl and the skins of his enemies. "Can you help us fix our time machine?" Seymore asks.

Description

The language synthesizer on Seymore's time machine is broken. It's failing to recognize which phrases are valid expressions of time.

    A proper expression of time consists of a list.

    A list is defined as one of the following: (element), (element element>, or (element element element

    An element is defined as one of the following: list, equation, or][

    An equation is defined as one of the following: element operator element, or element operator

    The valid operators are: +, -, *, /, } #, %, &

    All characters not mentioned above are invalid. Spaces will not occur in any sequences.

    The input will be a sequence of characters. Output will be true if the sequence is a valid expression of time, or false if it is not.

Examples

```
(][][][{
true
```

```
((][][+(][)][{})
true
```

```
((][][+(][)][{}>
false
```