

Write a function that takes a string of parentheses, and determines if the order of the parentheses is valid. The function should return `true` if the string is valid, and `false` if it's invalid.

Examples

```
"()"          => true
")((()))"    => false
"("          => false
"((()))((()()()))" => true
```

Constraints

```
0 <= input.length <= 100
```

Along with opening `(` and closing `)` parenthesis, input may contain any valid ASCII characters.

Furthermore, the input string may be empty and/or not contain any parentheses at all. Do **not** treat other forms of brackets as parentheses (e.g. `[]`, `{ }`, `< >`).