A balanced delimiter starts with an opening character ((, [, {), ends with a matching closing character (), ], } respectively), and has only other matching delimiters in between. A balanced delimiter may contain any number of balanced delimiters.

Examples

The following are examples of balanced delimiter strings:

()[]{}

([{}])

([]{})

The following are examples of invalid strings:

([)]

([]

[])

([})

Input is provided as a single string. Your output should be True or False according to whether the string is balanced. For example:

Input:

([{}])

Output:

True

