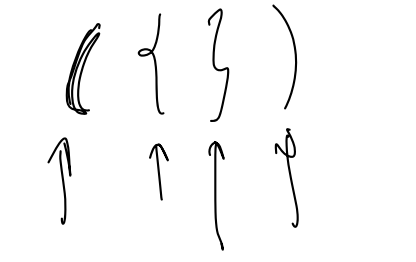
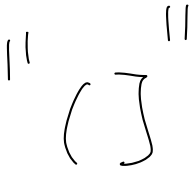
Given a string input, with '(', ')', '{', '}', '[', ']', determine if input string is valid

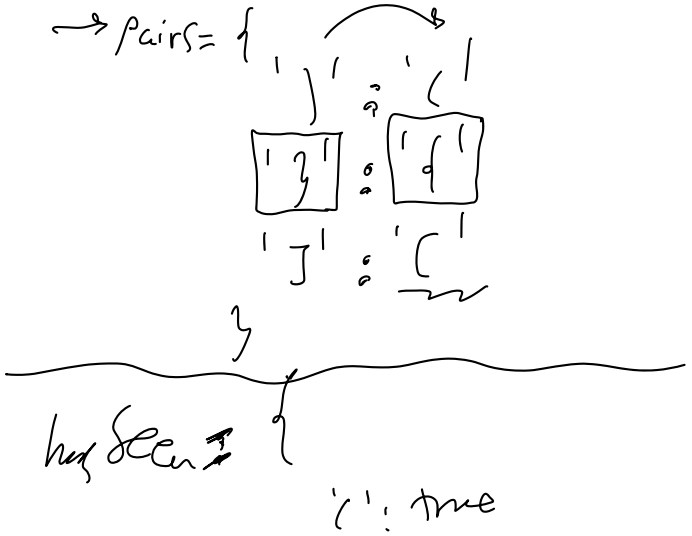
Valid if:

An input string is valid if:

1. Open brackets must be closed by the same type of brackets. ( )
2. Open brackets must be closed in the correct order. ({ })
3. Every close bracket has a corresponding open bracket of the same type.



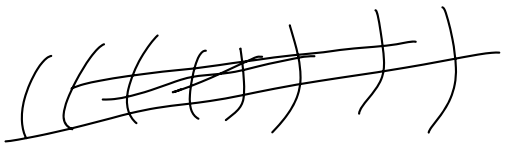




return False

X Not a valid Solution

- has to start with open parenthesis



→ pop them from stack

→ if pop till empty → we are good

→ Stack later structure

→ first open parenthesis must match the last item in open stack

→ create a stack of open parenthesis

→ create pairs dict (hash map)

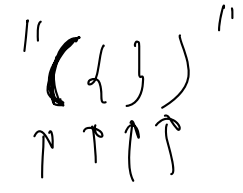
if open, add to stack

if closed, check if it matches the last one in stack

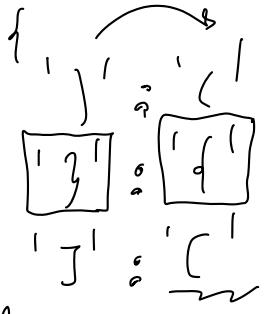
if not → return false

if yes → pop open Parenthesis from stack

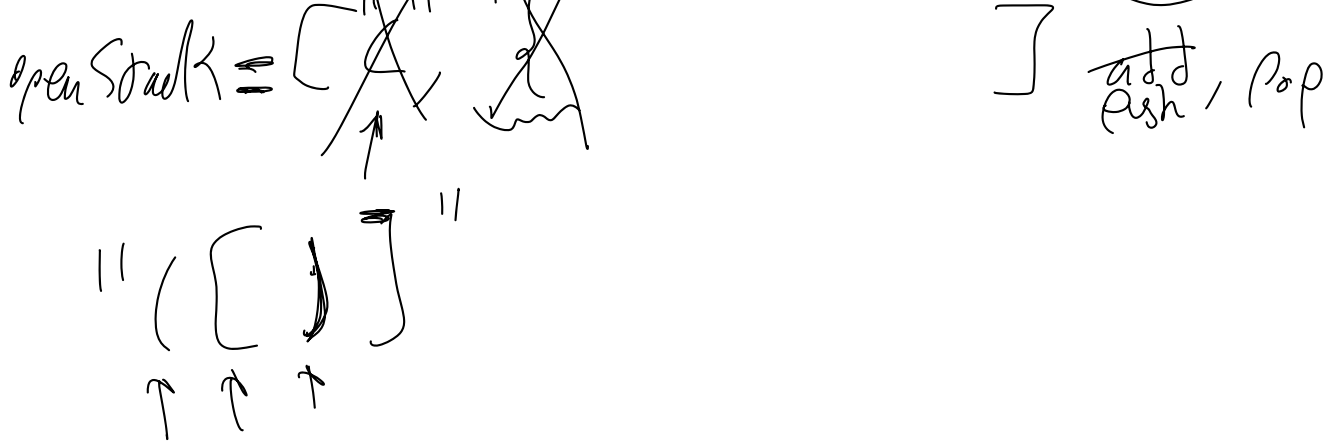
e.g.



→ pairs = {



}



Note: - have to check if it is closed, and it is not at the beginning, i.e. → len(open_stak != 0)

- at the end we return true if len of stack == 0
else return false