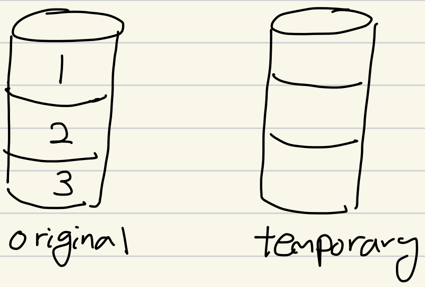
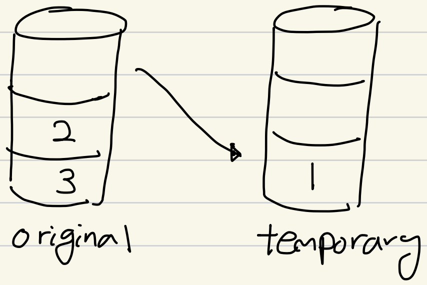
Stacks & Queues Practice Problem

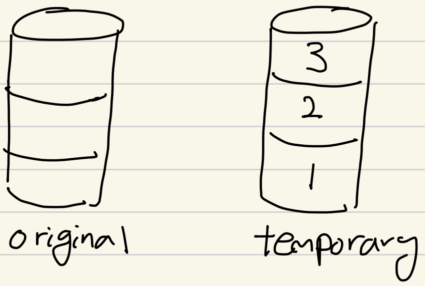
<P3>



1. Create a temporary stack



2. after popping an element, push element to temporary stack



3. continue till the stack is reversed

<P4>

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1. Create an empty stack
2. iterate through elements in the input String
      → if character = opening bracket ("(", "[", "{")
            ↳ push to stack
     → if character = closing bracket (")", "]", "}")
            ↳ check if the stack is empty
                  ↳ if empty
                        ↳ return false since no pair

                 ↳ if not empty
                        ↳ pop element from stack&check
                          if it is a matching pair. If not,
                          return false

2. Afterprocessing every element, if the stack is empty
   return true. If not, return false
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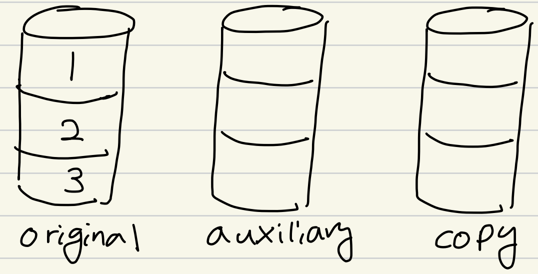
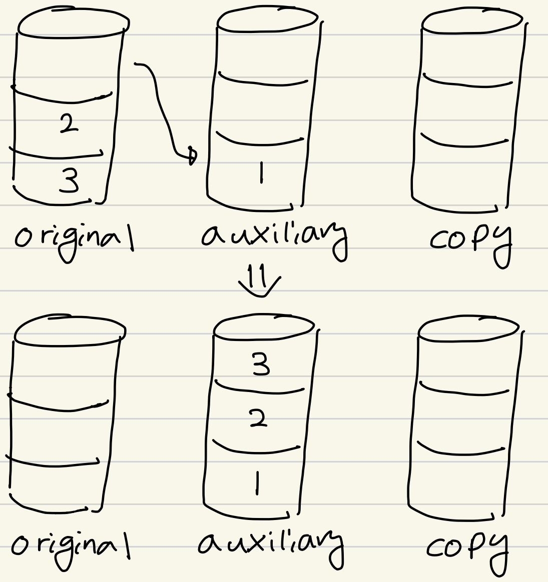
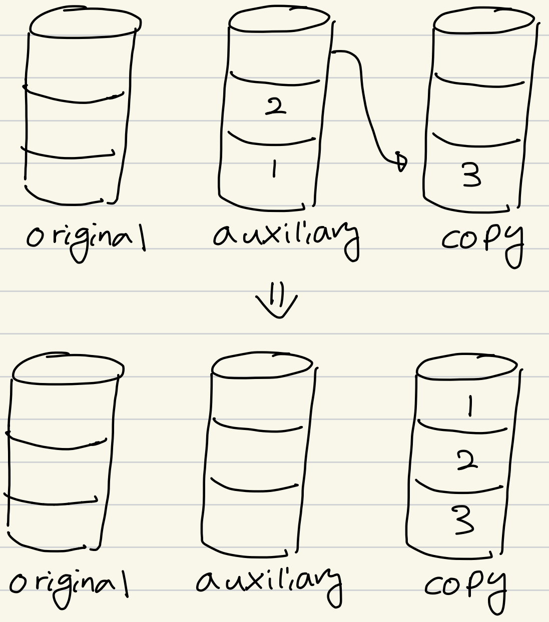
<P5>



1. create two empty stacks; one is an auxiliary stack, and the other is our copy stack.



2. pop an element from the original stack and push to the auxilary stack until we end up with a reversed version of the original



3. pop an element from the auxllary stack and push to the copy stack until we end up with a copy of the original