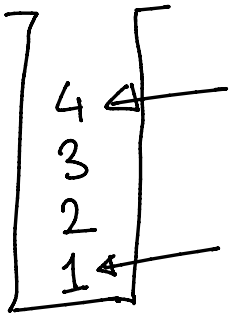
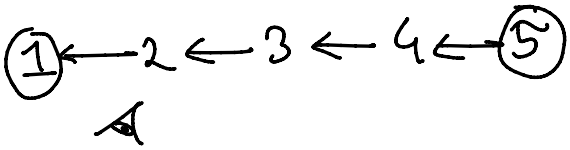
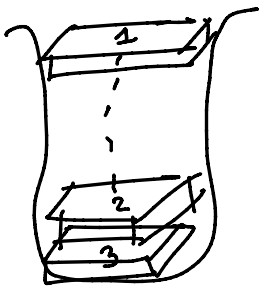
Class 05

Thursday, May 27, 2021 10:07 PM

Stack LIFO → Last In First Out







Parentheses Balance

((()))()

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(())

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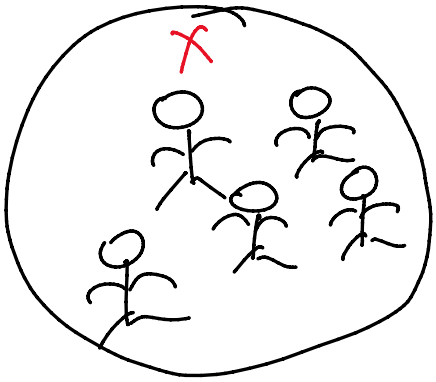
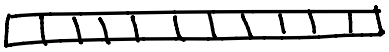
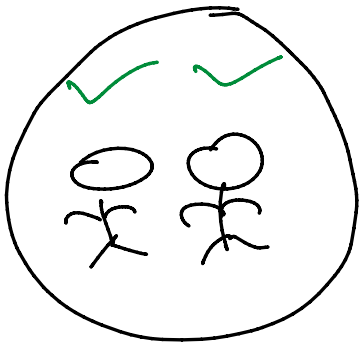
)()(







$10^5 \rightarrow 10^{10}$

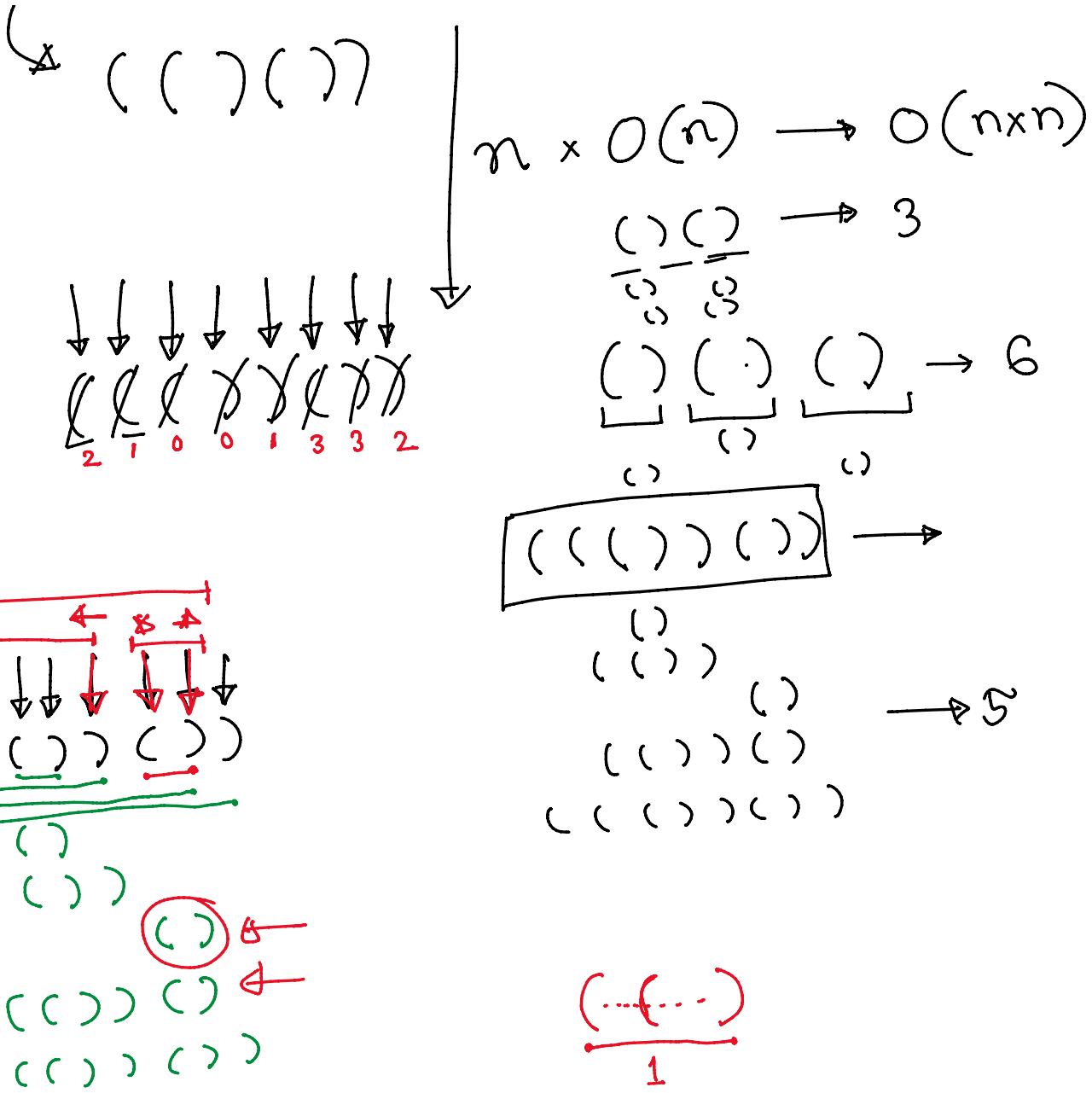
$\frac{10^{10}}{10^8} \rightarrow 10^2$

((()))()

((())())

O(n)

n = length of string


(( ) ( ))
n x O(n) → O(nxn)
( ) ( ) → 3
( ) ( ) ( ) → 6
((( )) ( ))
(( ))
( ) → 5
(( )) ( )
((( )) ( ))
2 1 0 0 1 3 3 2
(( )) ( ))
( )
(( ))
( )
(( )) ( )
((( )) ( ))
(... (...)
1
( ) ( ) ( ) ( )
store[] = {0, 1, 0, 2, 0, 3, 0, 4} → 1+2+3+4 = 10
((( )) ( ))
store[] = 0 0 0 1 1 0 2 1 → 5