

$O(n)$

size of the array

10^5

$i = 1$

$O(n^2)$

$O(m)$

while

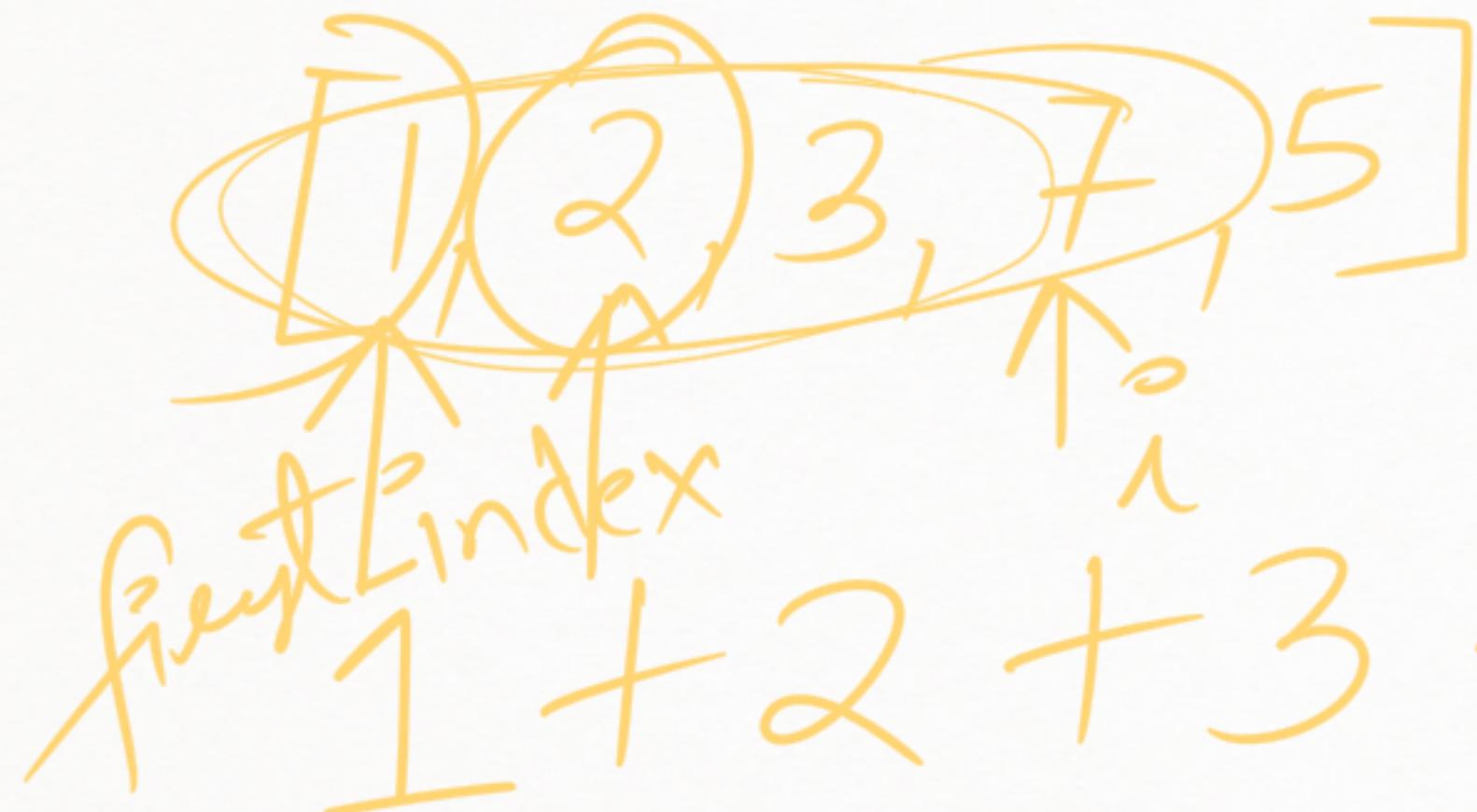
$i < n$

$j = 1$

while $j < 30$

n is very very big
 $N >>>$

$$S=12$$



Current-sum = 13

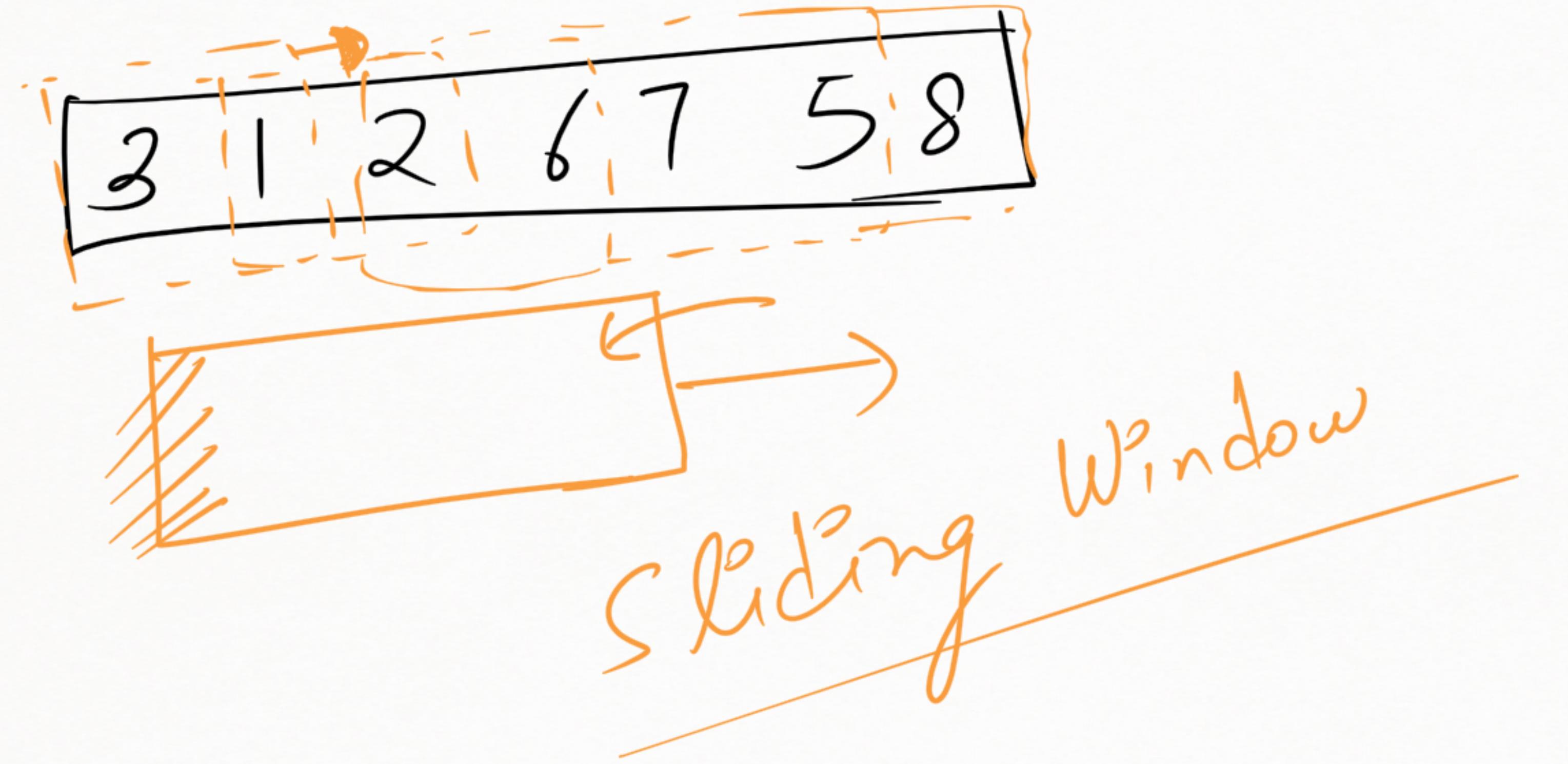
$$1 + 2 + 3 + 7$$

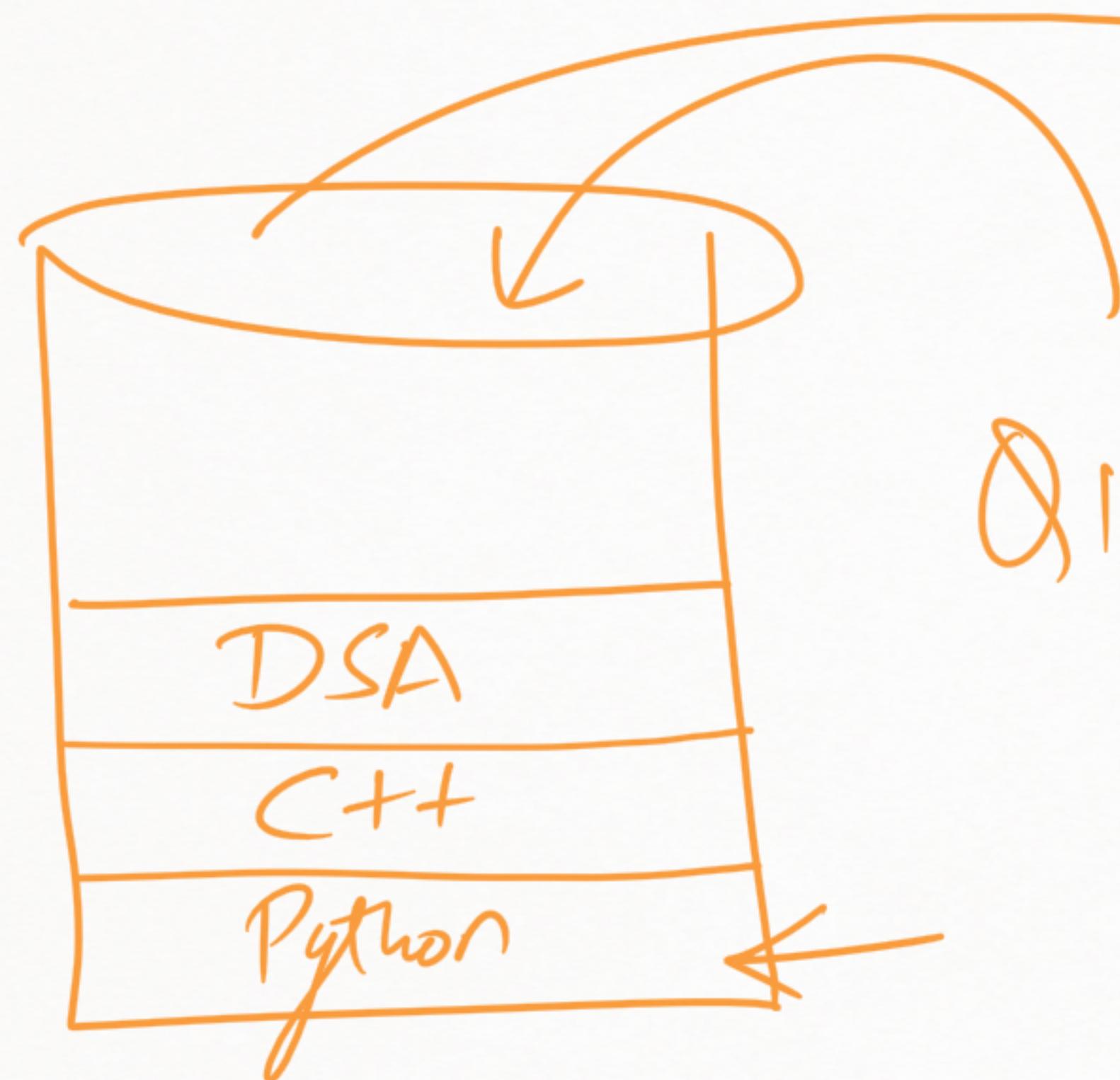
$$= 13$$



Current

$$4 + 3 = 7$$





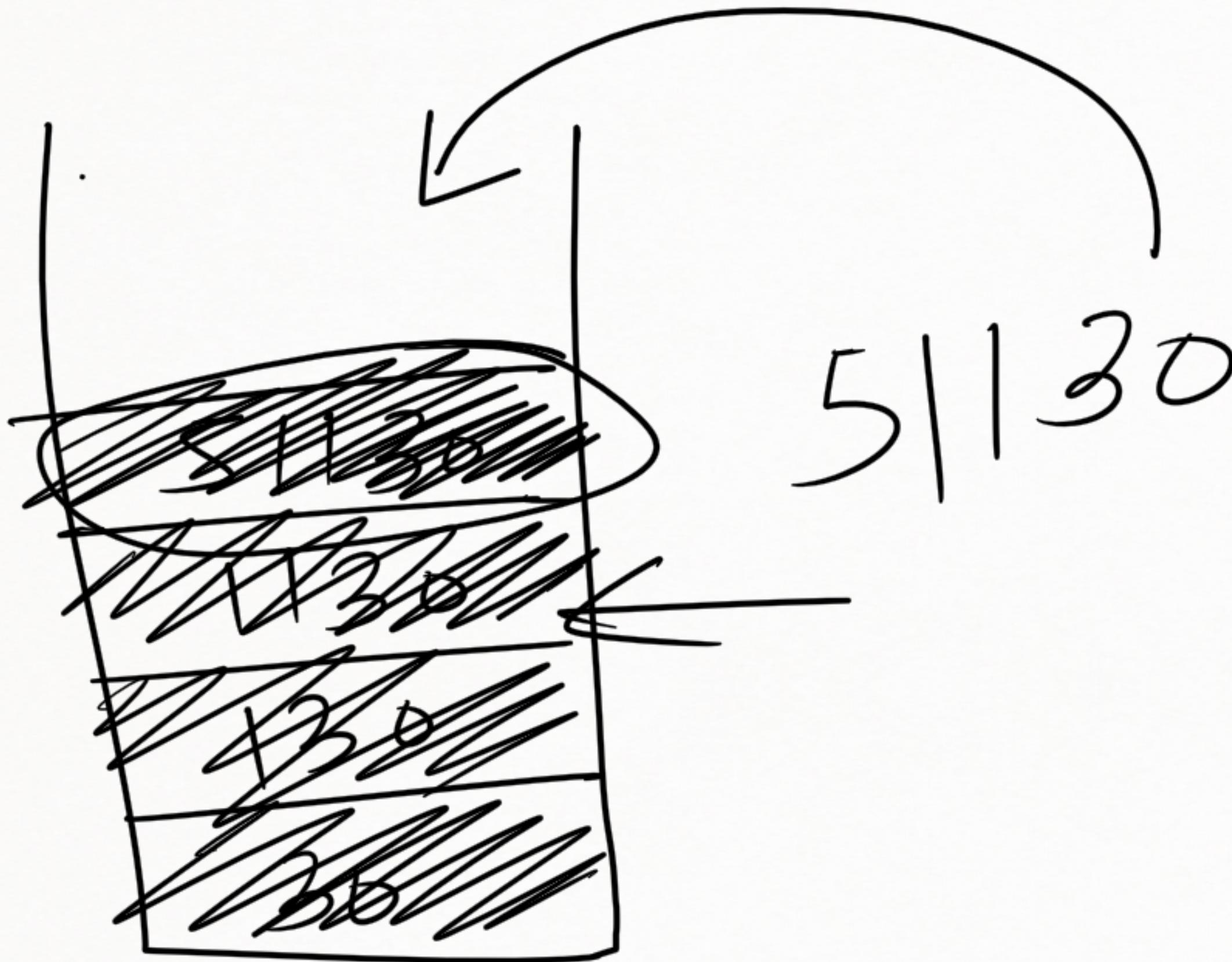
→ only open at Top

Q1 Which is the first book which will be removed?

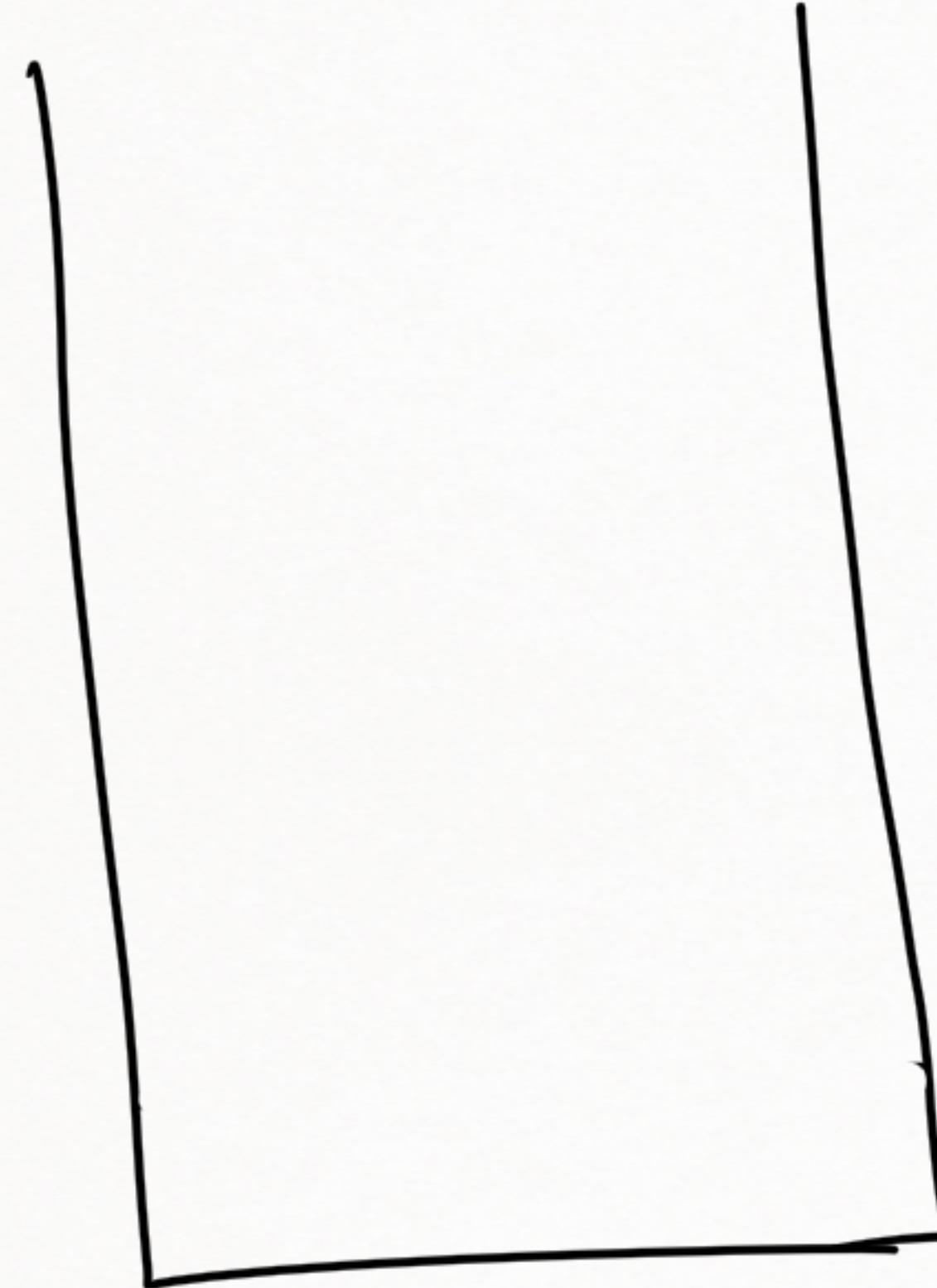


Q2 What was the last book which was inserted? \Rightarrow DSA

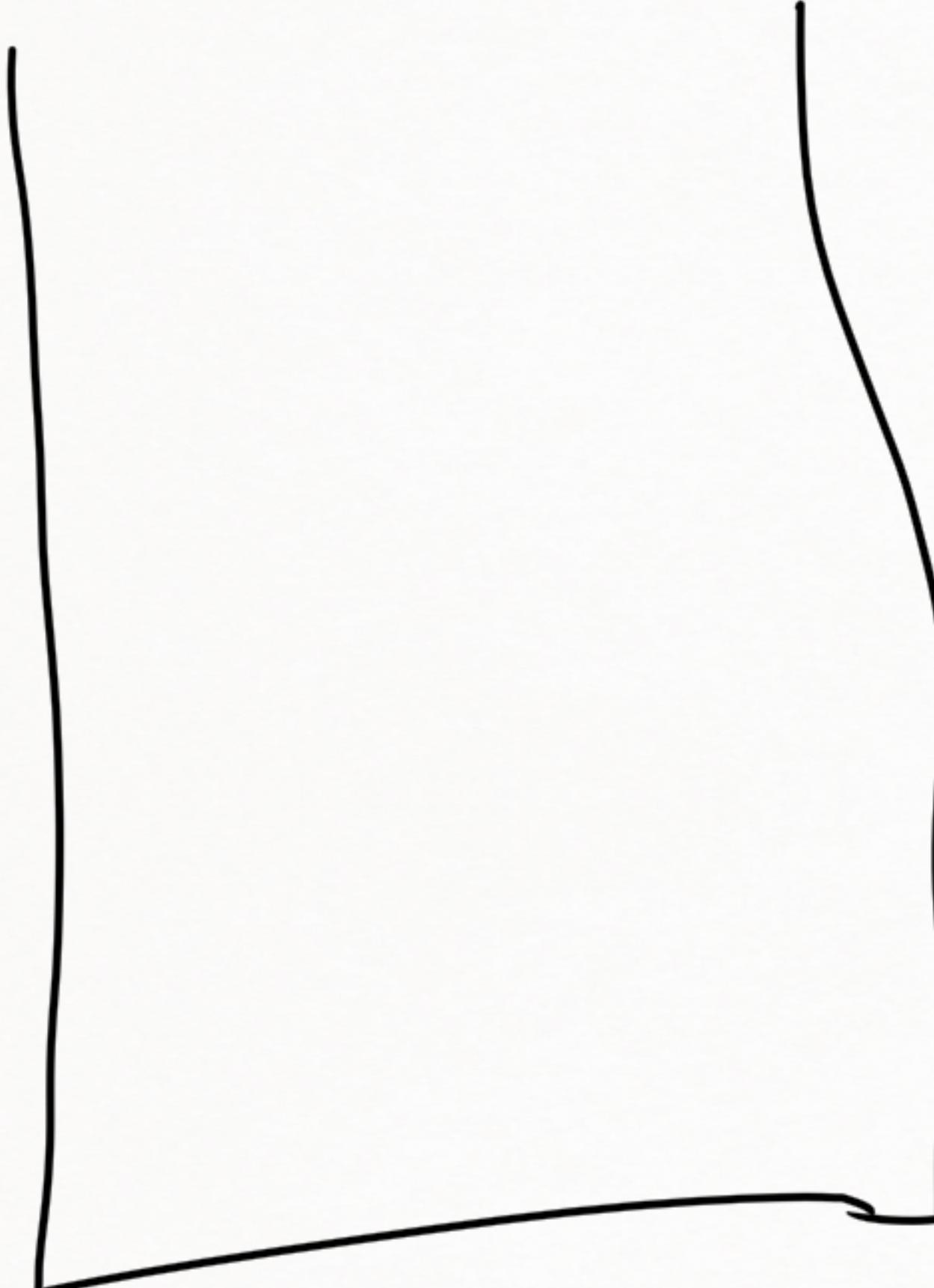
LIFO



peek()
pop()
peek
pop()
pop()
peek()



push(15) ✓
~~push(23)~~
~~push(17)~~
~~pop()~~
~~pop()~~
~~push(63)~~
~~pop()~~ ✓
peak() $\Rightarrow 15$



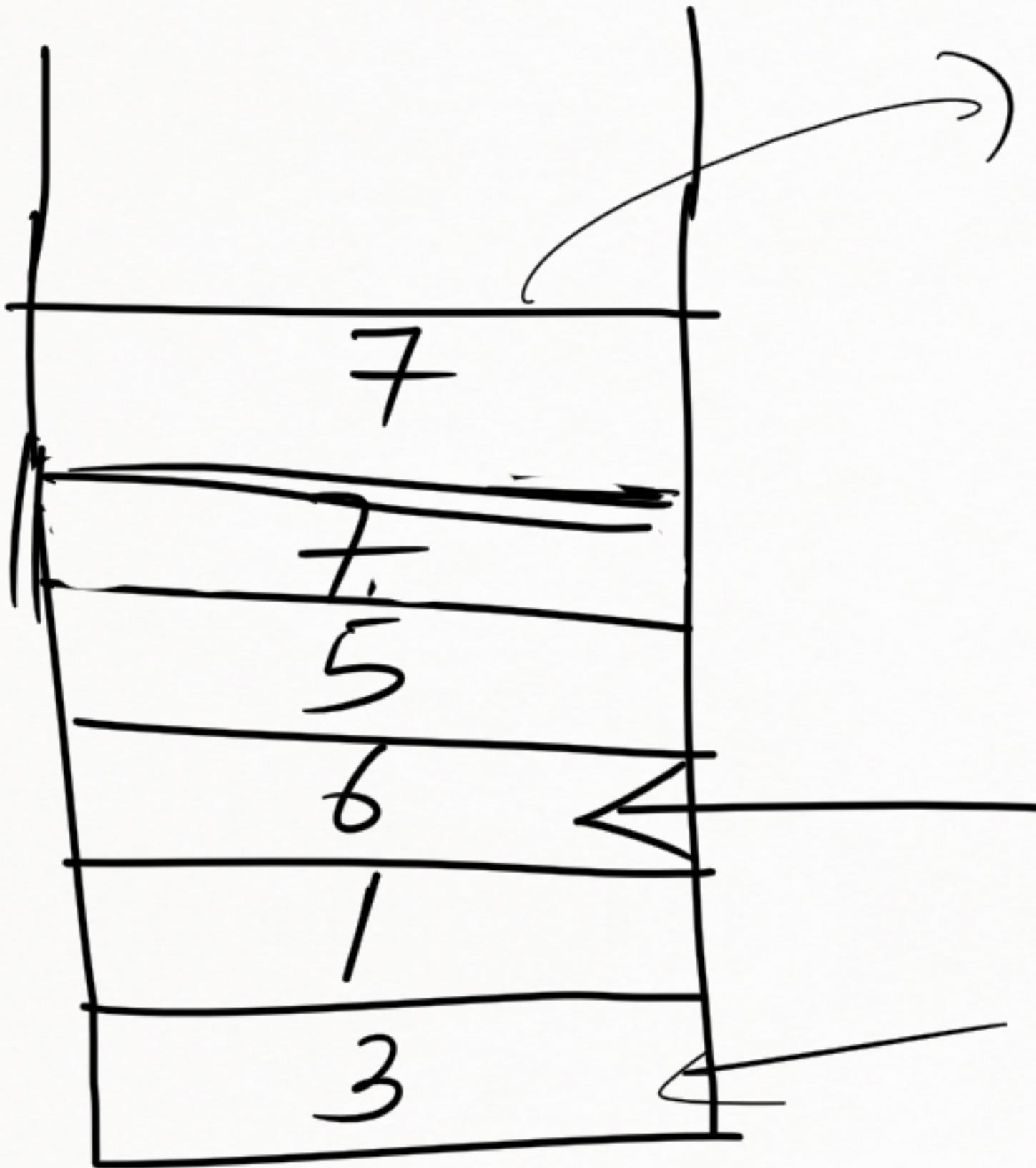
~~push(119)~~
~~pop()~~
push(63)
~~push(19)~~
~~push(200)~~
~~pop()~~
~~pop()~~
peek() => 63

Solve it using stacks

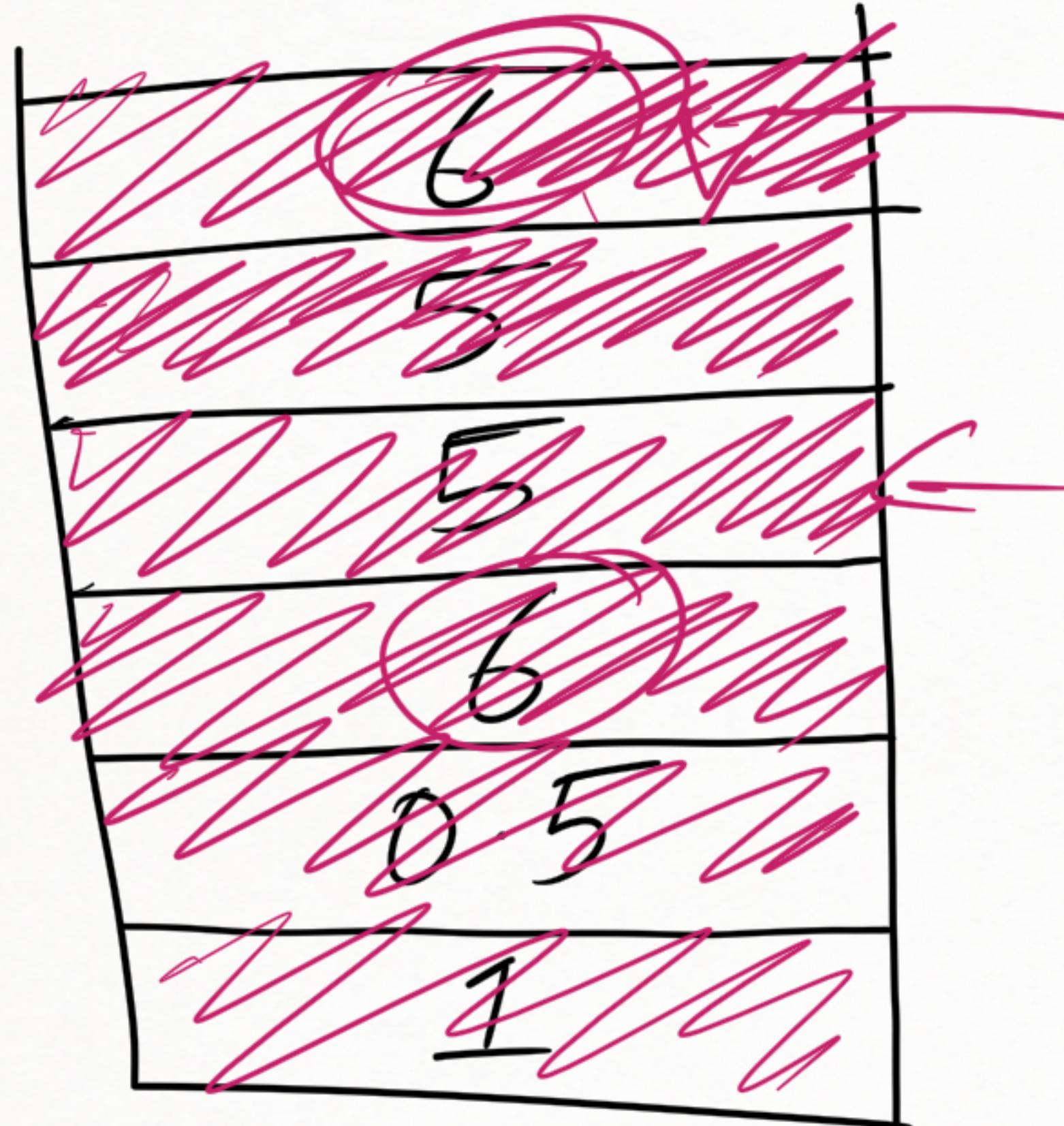
Push, Pop,

max

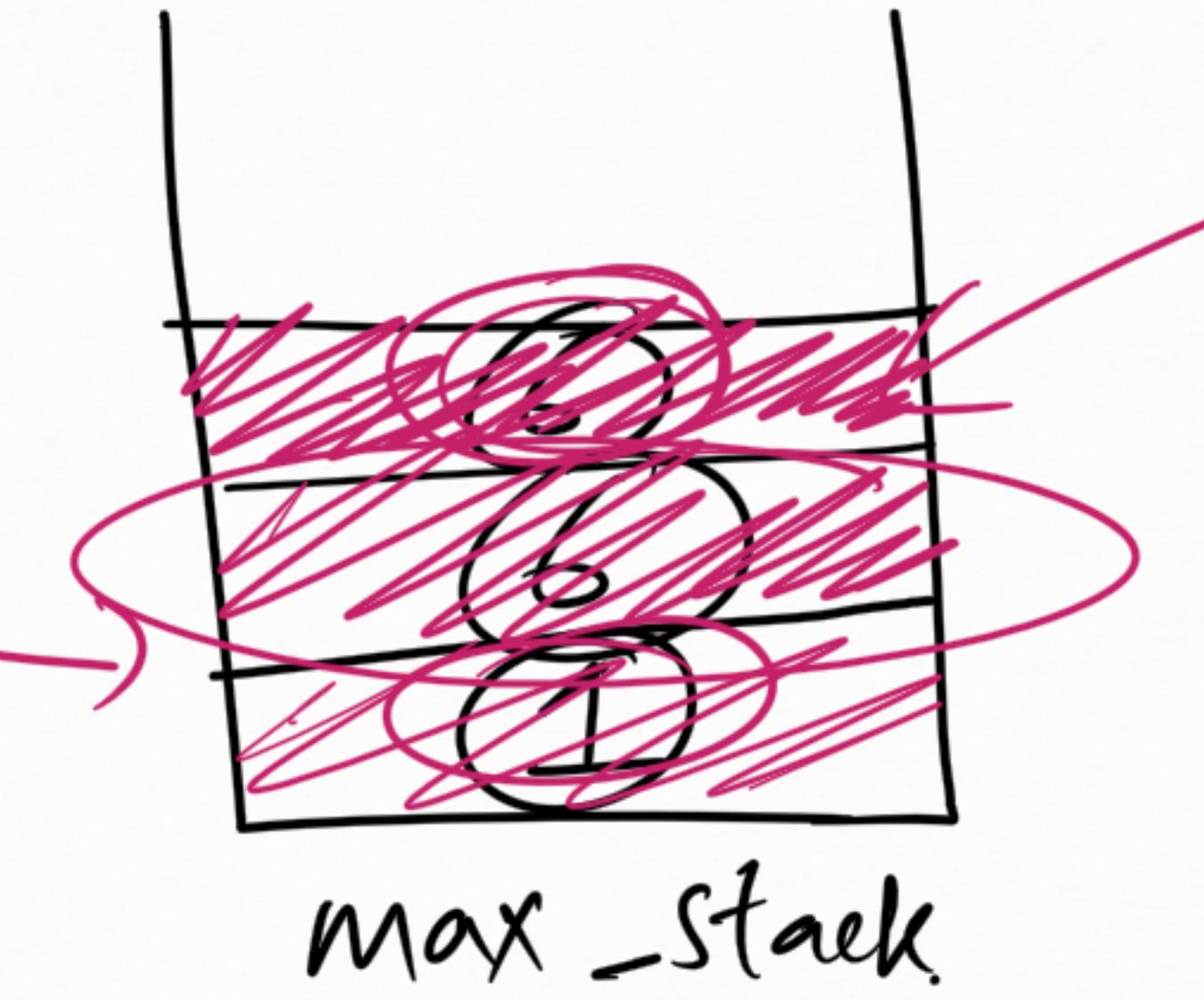
loop not allowed.



push(3)
max() => 3
push()
push(6) ✓
push(5)
push(7)
push(7)
max() = 7
pop()
max() = 6



Original Stack



~~Pop()~~
~~Pop()~~

push 1
max peek
max_stack

push 0.5
max

push 6
max peek
max_stack

push 5
push 5
push 6

~~XW~~ Use Stack

expression matching

Parenthesis

{
}

0 0 3 0 0
✓