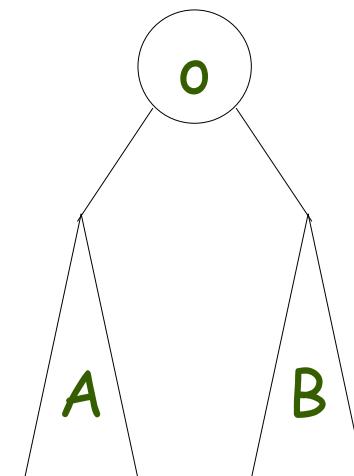


# Infix to Postfix Conversion Using Stack

# Observation 1

Infix:  $AoB$

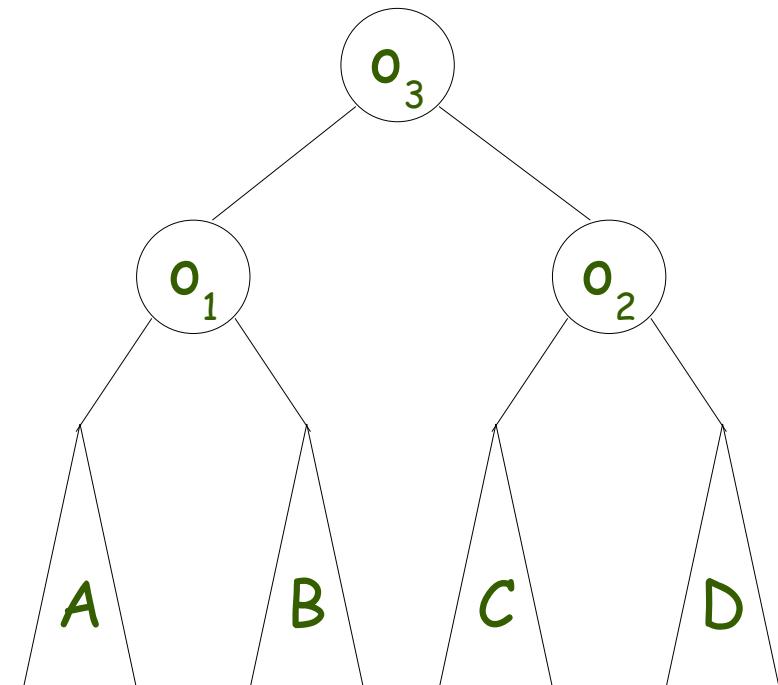
Postfix:  $ABo$



# Observation 1

Infix:  $Ao_1Bo_3Co_2D$

Postfix:  $ABo_1CDo_2o_3$



# Observation 2

$$1 + 2 - 3 + 4$$

$$\begin{aligned} &= ((1 + 2) - 3) + 4 \\ &\Rightarrow 1 \ 2 + 3 - 4 + \end{aligned}$$

The diagram illustrates the mapping of tokens from the first line of code to the second line. Three arrows point from the '+' sign in the first line to the '+' sign in the second line. One arrow points from the '-' sign in the first line to the '-' sign in the second line. Another arrow points from the '3' in the first line to the '3' in the second line.

# Observation 3

$1 + 2 * 3 * 2 + 4$

$$= (1 + ((2 * 3) * 2)) + 4$$

$\Rightarrow 1 \ 2 \ 3 * 2 * + 4 +$

# Observation 3

$1 + 2 * 3 * 2 + 4$

$\Rightarrow 1$



# Observation 3

$1 + 2 * 3 * 2 + 4$

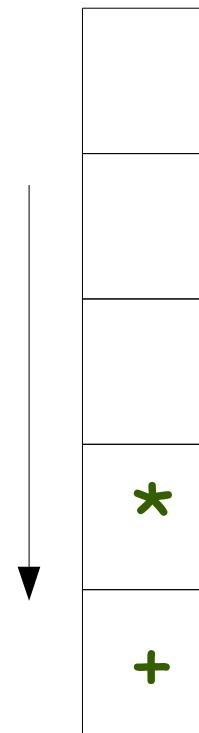
=> 1 2



# Observation 3

$1 + 2 * 3 * 2 + 4$

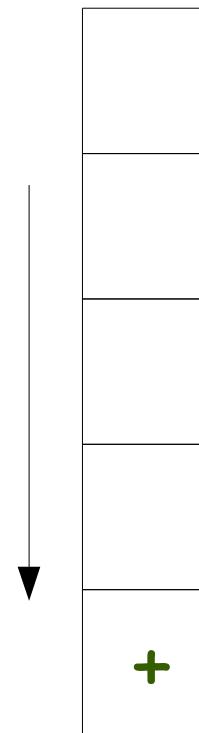
=> 1 2 3



# Observation 3

$1 + 2 * 3 * 2 + 4$

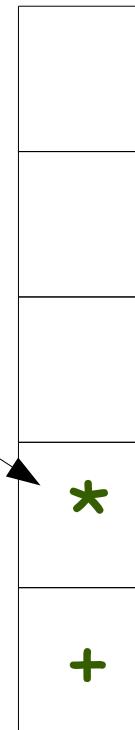
=> 1 2 3 \*



# Observation 3

$1 + 2 * 3 * 2 + 4$

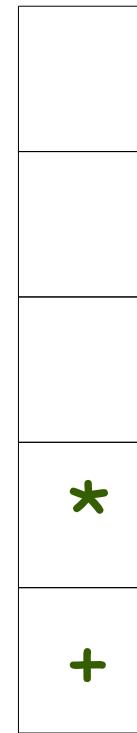
=> 1 2 3 \*



# Observation 3

$1 + 2 * 3 * 2 + 4$

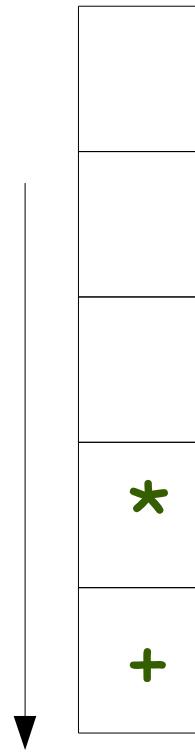
$\Rightarrow 1 \ 2 \ 3 * 2$



# Observation 3

$1 + 2 * 3 * 2 + 4$

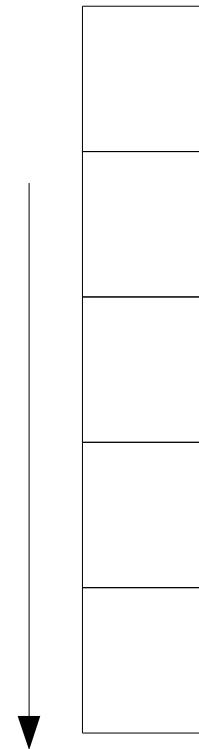
$\Rightarrow 1 \ 2 \ 3 * 2$



# Observation 3

$1 + 2 * 3 * 2 + 4$

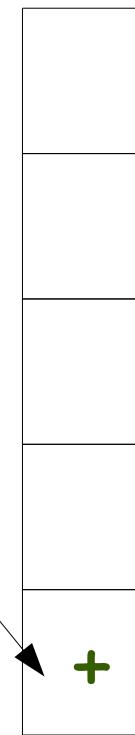
$\Rightarrow 1 \ 2 \ 3 * 2 * +$



# Observation 3

$1 + 2 * 3 * 2 + 4$

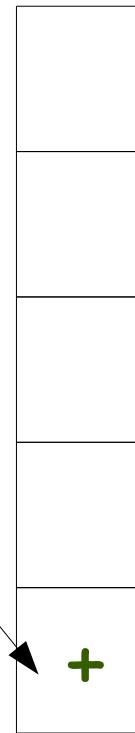
$\Rightarrow 1 \ 2 \ 3 * 2 * +$



# Observation 3

$1 + 2 * 3 * 2 + 4$

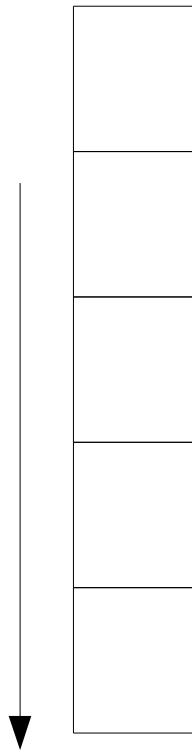
$\Rightarrow 1 \ 2 \ 3 * 2 * + 4$



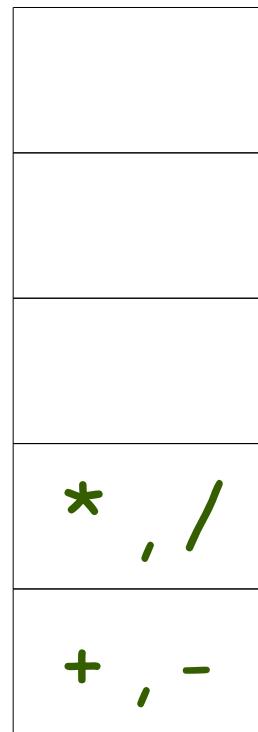
# Observation 3

$1 + 2 * 3 * 2 + 4$

$=> 1 \ 2 \ 3 * \ 2 * + \ 4 +$



# Observation 3



# Observation 4

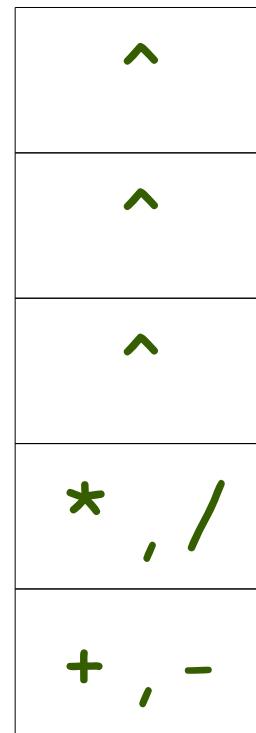
$$2 \uparrow 3 \uparrow 4$$

$$= 2 \uparrow (3 \uparrow 4)$$

$$\Rightarrow 2 \ 3 \ 4 \uparrow \uparrow$$

.....How?

# Observation 4



# Bonus: Handling the Parenthesis

$$5 * (2 + 3) + 1$$


Have to be  
done first!

# Bonus: Handling the Parenthesis

