

```
for (x, c, l) in zip(feature_pyramid, self.class_pred, self.loc_pred):  
    class_preds.append(c(x).permute(0, 2, 3, 1))  
    loc_preds.append(l(x).permute(0, 2, 3, 1))
```

# POSTFIX TO INFIX

CCDSALG T2 AY 2020-2021

# POSTFIX TO INFIX

- Scan the postfix expression from left to right.
- If the scanned character is an operand, push it to the stack.
- If the scanned character is an operator, pop the top two values in the stack, affix the operator between them, then push the resulting string back to the stack.
- If all characters are processed, then the single expression in the stack is the infix notation

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:      **1** 2 3 \* + 4 +

Stack:        1,

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:        1, 2,

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:        1, 2, 3,

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:        1,

Output:       2 \* 3

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:        1, 2 \* 3,

Output:



# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* **+** 4 +

Stack:

Output:        1 + 2 \* 3

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* **+** 4 +

Stack:        1 + 2 \* 3,

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:        1 + 2 \* 3, 4,

Output:

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 

Stack:

Output:        1 + 2 \* 3 + 4

# POSTFIX TO INFIX

## Example 1:

Postfix:        1 2 3 \* + 4 +

Stack:

Output:        1 + 2 \* 3 + 4

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:      300 23 + 43 21 - \* 84 7 + /

Stack:        300,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:        300, 23,

Output:



# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 **+** 43 21 − \* 84 7 + /

Stack:

Output:        300 + 23

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 − \* 84 7 + /

Stack:        300 + 23,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:        300 + 23, 43,

Output:

# POSTFIX TO INFIX

## Example 2:


Postfix:        300 23 + 43 21 − \* 84 7 + /

Stack:        300 + 23, 43, 21,

Output:

# POSTFIX TO INFIX

## Example 2:


Postfix:        300 23 + 43 21  \* 84 7 + /

Stack:        300 + 23,

Output:       43 - 21

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21  \* 84 7 + /

Stack:        300 + 23, 43 - 21,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:

Output:        (300 + 23) \* (43 - 21)

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:        (300 + 23) \* (43 - 21),

Output:



# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:        (300 + 23) \* (43 - 21), 84,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:        (300 + 23) \* (43 - 21), 84, 7,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 − \* 84 7 + /

Stack:        (300 + 23) \* (43 − 21),

Output:       84 + 7

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 − \* 84 7 + /

Stack:        (300 + 23) \* (43 − 21), 84 + 7,

Output:

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:

Output:         $(300 + 23) * (43 - 21) / (84 + 7)$

# POSTFIX TO INFIX

## Example 2:

Postfix:        300 23 + 43 21 - \* 84 7 + /

Stack:

Output:         $(300 + 23) * (43 - 21) / (84 + 7)$

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        4,

Output:



# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        4, 8,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 − ∗ 3 2 − 2 2 + ∗ /

Stack:

Output:        4 + 8

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 − ∗ 3 2 − 2 2 + ∗ /

Stack:      4 + 8,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        4 + 8, 6,

Output:

# POSTFIX TO INFIX

## Example 3:


Postfix:        4 8 + 6 5 − \* 3 2 − 2 2 + \* /

Stack:        4 + 8, 6, 5,

Output:

# POSTFIX TO INFIX

## Example 3:


Postfix:      4 8 + 6 5  \* 3 2 - 2 2 + \* /

Stack:        4 + 8,

Output:       6 - 5

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5  \* 3 2 - 2 2 + \* /

Stack:        4 + 8, 6 - 5,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:

Output:        (4 + 8) \* (6 - 5)



# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5),

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5), 3,

Output:

# POSTFIX TO INFIX

## Example 3:


Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:      (4 + 8) \* (6 - 5), 3, 2,

Output:

# POSTFIX TO INFIX

## Example 3:


Postfix:      4 8 + 6 5 − \* 3 2  2 2 + \* /

Stack:      (4 + 8) \* (6 − 5),

Output:      3 − 2

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2  2 2 + \* /

Stack:      (4 + 8) \* (6 - 5), 3 - 2,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5), 3 - 2, 2,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5), 3 - 2, 2, 2,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5), 3 - 2,

Output:        2 + 2



# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:      (4 + 8) \* (6 - 5), 3 - 2, 2 + 2,

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:        (4 + 8) \* (6 - 5),

Output:       (3 - 2) \* (2 + 2)

# POSTFIX TO INFIX

## Example 3:

Postfix:      4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:      (4 + 8) \* (6 - 5), (3 - 2) \* (2 + 2),

Output:

# POSTFIX TO INFIX

## Example 3:

Postfix:        4 8 + 6 5 - \* 3 2 - 2 2 + \* /

Stack:

Output:         $(4 + 8) * (6 - 5) / ((3 - 2) * (2 + 2))$

# POSTFIX TO INFIX

## Example 3:

Postfix:         $4\ 8\ +\ 6\ 5\ -\ *\ 3\ 2\ -\ 2\ 2\ +\ */$

Stack:

Output:         $(4 + 8) * (6 - 5) / ((3 - 2) * (2 + 2))$

```
for (x, c, l) in zip(feature_pyramid, self.class_pred, self.loc_pred):  
    class_preds.append(c(x).permute(0, 2, 3, 1))  
    loc_preds.append(l(x).permute(0, 2, 3, 1))
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