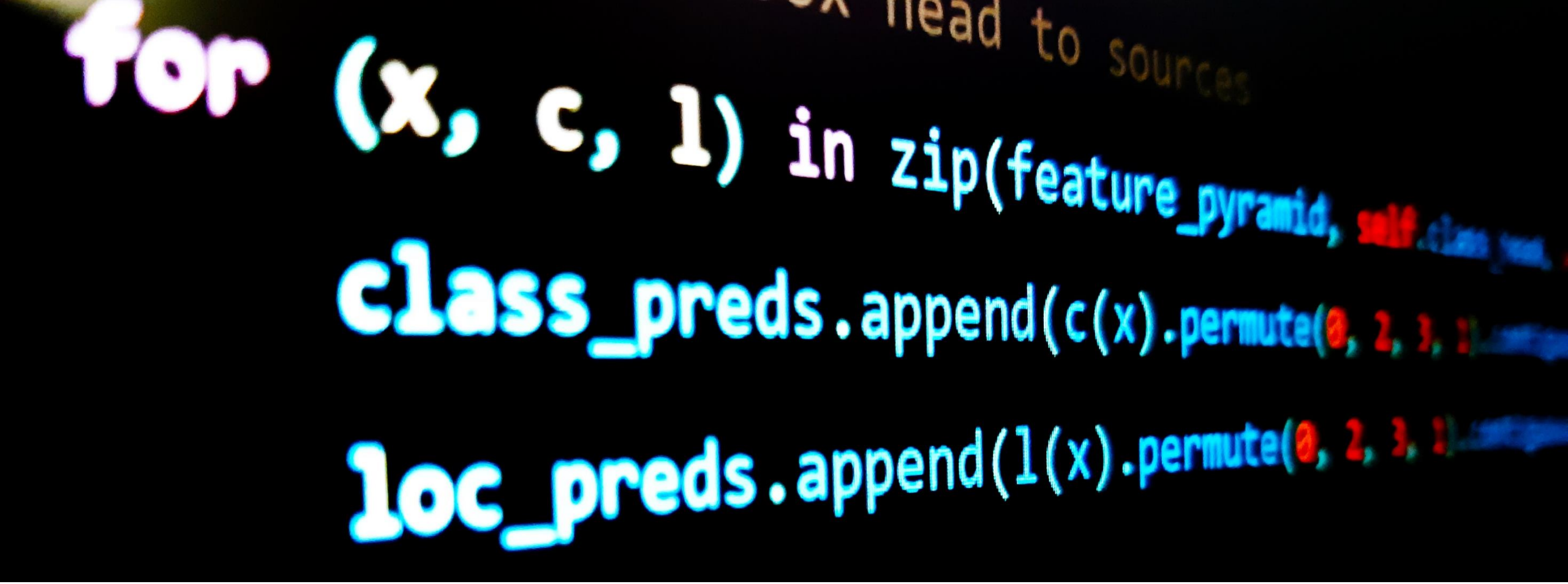

PREFIX TO INFIX

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PREFIX TO INFIX

- Reverse the prefix expression
- Scan the reversed prefix 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

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed:

Stack:

Output:

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack:

Output:

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack: $4,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack: $4, 3,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack: $4, 3, 2,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed: $4\ 3\ 2\ * 1 + +$

Stack: $4,$

Output: $2 * 3$

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack: $4, 2*3,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $++1*234$

Reversed: $432*1++$

Stack: $4, 2*3, 1,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed: $4\ 3\ 2\ * 1 + +$

Stack: $4,$

Output: $1 + 2 * 3$

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed: $4\ 3\ 2\ * 1 + +$

Stack: $4, 1 + 2 * 3,$

Output:

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed: $4\ 3\ 2\ * 1 + +$

Stack:

Output: $1 + 2 * 3 + 4$

PREFIX TO INFIX

Example 1:

Prefix: $+ + 1 * 2\ 3\ 4$

Reversed: $4\ 3\ 2\ * 1 + +$

Stack:

Output: $1 + 2 * 3 + 4$

PREFIX TO INFIX

Example 2:

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

Reversed:

Stack:

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack:

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $7,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $7, 84,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack:

Output: $84 + 7$

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 21,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 21, 43,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7,$

Output: $43 - 21$

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 43 - 21,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 43 - 21, 23,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 43 - 21, 23, 300,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 43 - 21,$

Output: $300 + 23$

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7, 43 - 21, 300 + 23,$

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack: $84 + 7,$

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

PREFIX TO INFIX

Example 2:

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

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

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

Output:

PREFIX TO INFIX

Example 2:

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

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

Stack:

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

PREFIX TO INFIX

Example 2:

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

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

Stack:

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

PREFIX TO INFIX

Example 3:

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

Reversed:

Stack:

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack:

Output:

PREFIX TO INFIX

Example 3:

Prefix: / * + 4 8 – 6 5 * – 3 2 + 2 2

Reversed: 2 2 + 2 3 – * 5 6 – 8 4 + * /

Stack: 2,

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $2, 2,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack:

Output: $2 + 2$

PREFIX TO INFIX

Example 3:

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

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

Stack: $2 + 2,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $2 + 2, 2,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $2 + 2, 2, 3,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $2 + 2,$

Output: $3 - 2$

PREFIX TO INFIX

Example 3:

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

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

Stack: $2 + 2, 3 - 2,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack:

Output: $(3 - 2) * (2 + 2)$

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2),$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2), 5,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2), 5, 6,$

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2),$

Output: $6 - 5$

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2), 6 - 5,$

Output:

PREFIX TO INFIX

Example 3:

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

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

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

Output:

PREFIX TO INFIX

Example 3:

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

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

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

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2), 6 - 5,$

Output: $4 + 8$

PREFIX TO INFIX

Example 3:

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

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

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

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack: $(3 - 2) * (2 + 2),$

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

PREFIX TO INFIX

Example 3:

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

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

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

Output:

PREFIX TO INFIX

Example 3:

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

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

Stack:

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

PREFIX TO INFIX

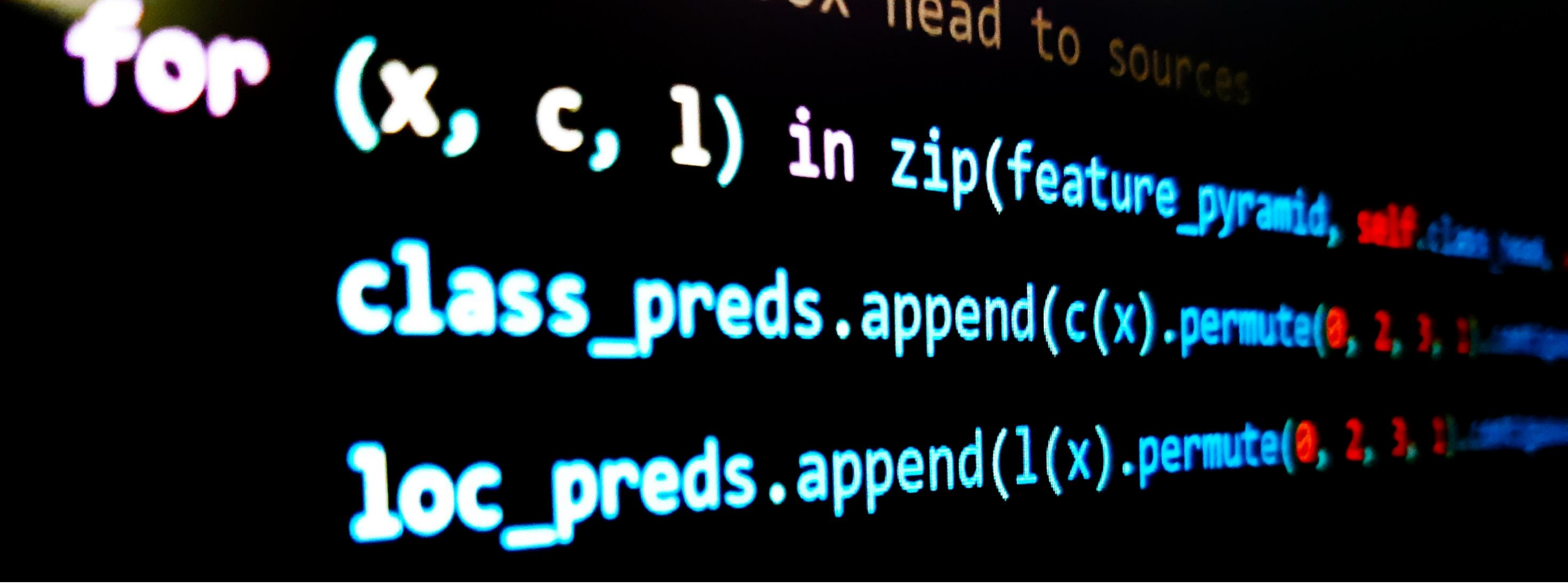
Example 3:

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

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

Stack:

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



PREFIX TO INFIX

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