

Prompt

Postfix notation is an unambiguous way of writing an arithmetic expression without parentheses. It is defined so that if “ $(exp_1)\mathbf{op}(exp_2)$ ” is a normal, fully parenthesized expression whose operation is **op**, the postfix version of this is “ $pexp_1 pexp_2 \mathbf{op}$ ”, where $pexp_1$ is the postfix version of exp_1 and $pexp_2$ is the postfix version of exp_2 . The postfix version of a single number or variable is just that number or variable. For example, the postfix version of “ $((5 + 2) * (8 - 3))/4$ ” is “ $5\ 2\ +\ 8\ 3\ -\ *\ 4\ /\$ ”. Describe a nonrecursive way of evaluating an expression in postfix notation.

Discussion

See the solution for Exercise 6.34.