

Answer on Question #60389, Programming & Computer Science / C++

Question:

Draw a binary tree that represents the following arithmetic expression, and use the tree traversals to find the prefix and postfix expression. Show your steps to find prefix and postfix expression

$((a + b) + c * (d + e) + f) * (g + h)$

Solution:

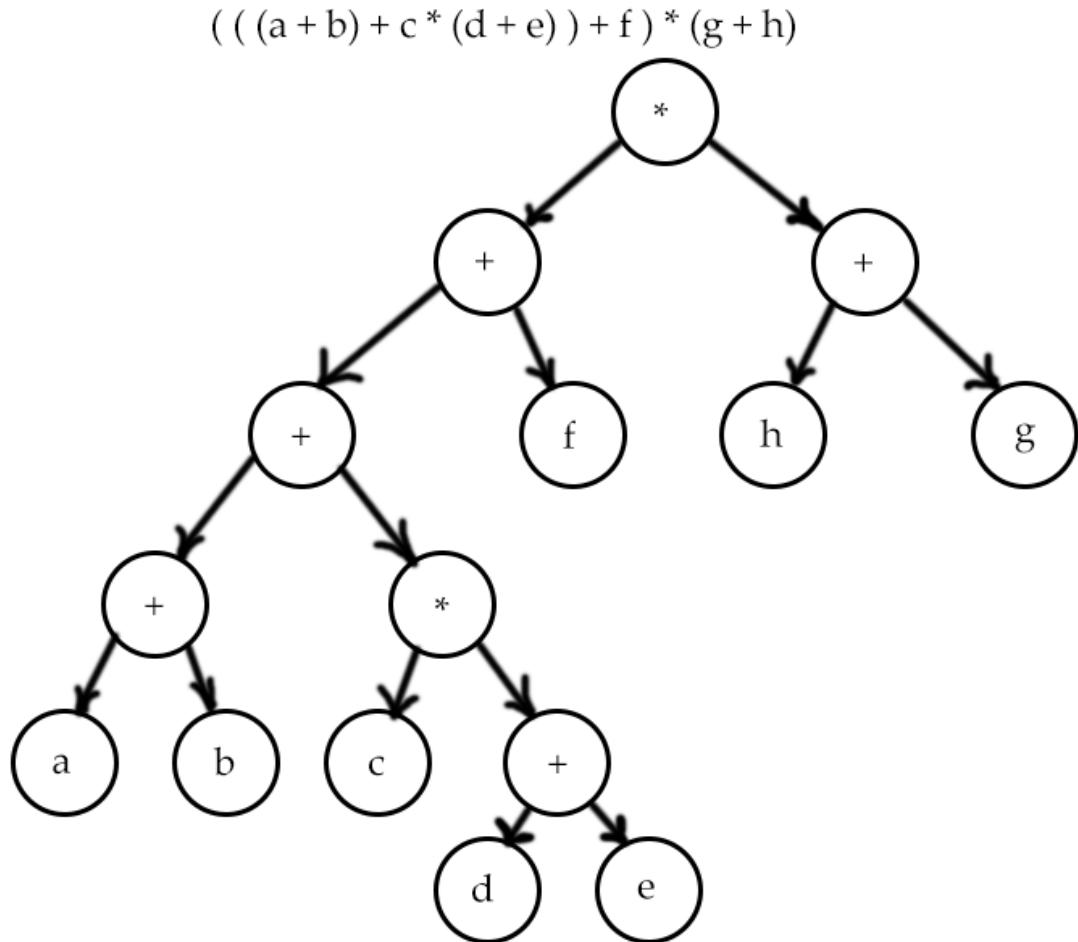
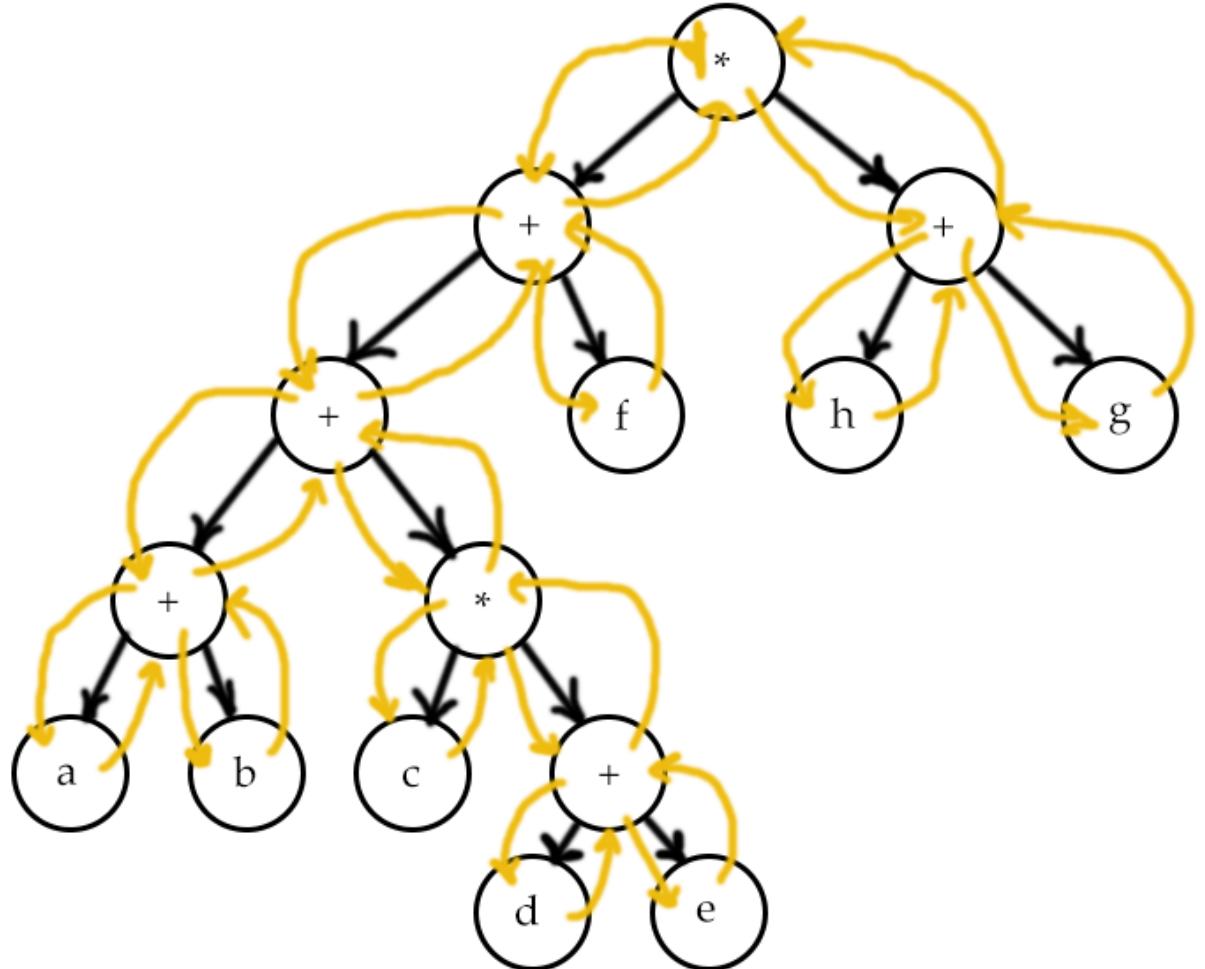


Figure 1. Expression binary tree

Prefix: *++ab*c+def+hg

$(((a + b) + c) * (d + e)) + f) * (g + h)$



Postfix: $ab+cde^{*}+f+hg+^{*}$

$$(((a + b) + c * (d + e)) + f) * (g + h)$$

