

05-G3

二叉树

后序遍历：表达式树

这三家的人，在族谱之中寻查自己的谱系，却寻不着，
因此算为不洁，不准供祭司的职任

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Expression + Parentheses

The diagram illustrates the construction of a parse tree for the expression $(0! + 1)^{((2 * 3! + 4) - 5)} + 6 * 7 - 8 * 9$. The root node is the full expression. It branches into a sum of two terms. The first term is $(0! + 1)^{((2 * 3! + 4) - 5)}$, which further branches into a power operation and its arguments. The second term is $6 * 7 - 8 * 9$, which branches into a subtraction operation and its arguments. The diagram uses color-coding: blue for parentheses, red for operators, and green for numbers and factorials.

Expression - Parentheses

The diagram illustrates the step-by-step construction of a parse tree for the expression $(0!+1)^{(2*3!+4-5)+6*7-8*9}$. The root node is the full expression. It branches into three children: $(0!+1)$, $^$, and $(2*3!+4-5)+6*7-8*9$. The left child $(0!+1)$ branches into $($, $^$, and 1 . The middle child $^$ branches into $($ and $)$. The right child $(2*3!+4-5)+6*7-8*9$ branches into $($, $+$, and $(6*7-8*9)$. This process continues until all leaf nodes are the original tokens of the expression.

Expression Tree ~ Postorder ~ RPN

(0 ! + 1) ^ (2 * 3 ! + 4 - 5) + 6 * 7 - 8 * 9
0 ! 1 + 2 3 ! * 4 + 5 - ^ 6 7 * + 8 9 * -

