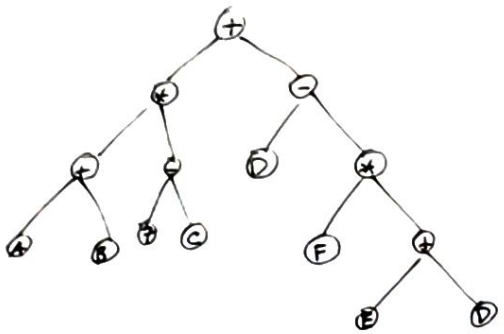
MCS - 360 HW 8 (Rubric)

Problem 1. (6pts)



(4 pts)

Pre-order: + * + A B - 7 C - D * F + E D (2pts)

Post-order: A B + 7 C - * D F E D + * - + (2pts)

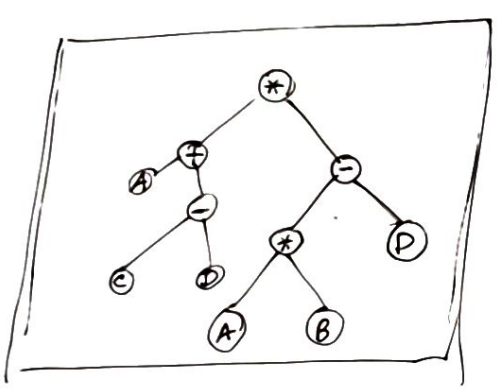
In-order: ((A+B)*(7-C)) + (D - (F * (E+D))) (2pts)

→ (A+B) * (7-C) + D - F*(E+D)

Problem 2. Create a tree representing A C D - + A B * D - * ← this is postfix (1pt)

Rewrite the tree representation in the other notations.

Tree corresponding to the postfix notation:



(1pt)

Infix: (A + (C-D)) * ((A*B) - D)

(1pt)

→ (A+C-D) * (A*B-D)

Prefix: * + A - C D - * A B D

(1pt)

When writing infix expression, always include parentheses as required and then remove the redundant parentheses. Only keep the parentheses around subexpressions where the operator has a lower precedence than the operator of the parent expression.