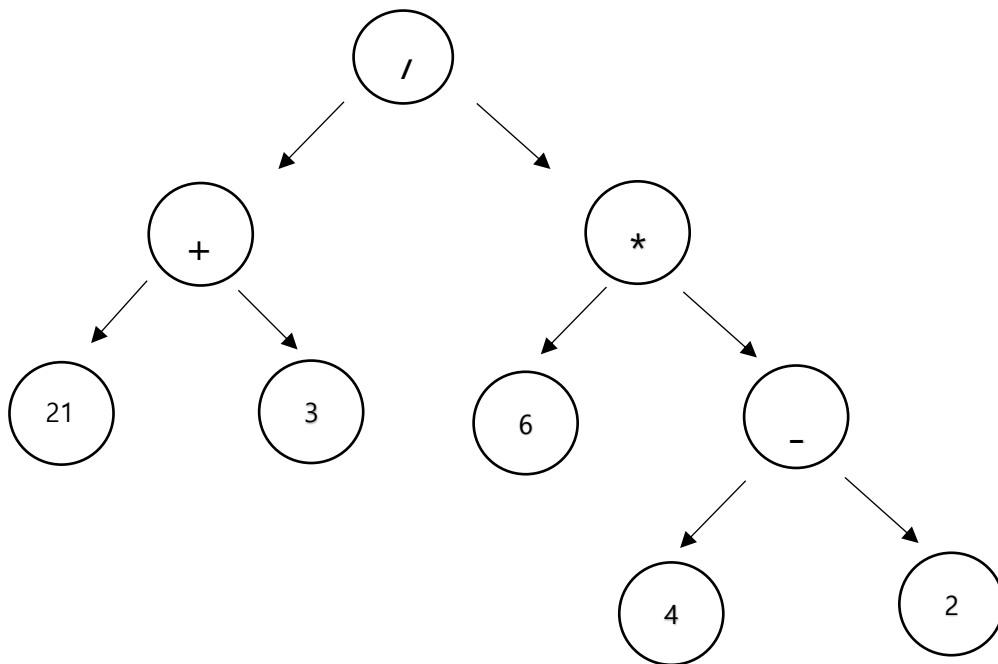Homework 3 Written Parts

Jaeha Huh

1. Consider the following expression in infix notation: $((21 + 3)/(6 * (4-2)))$.

(a) Draw the expression tree for this expression.
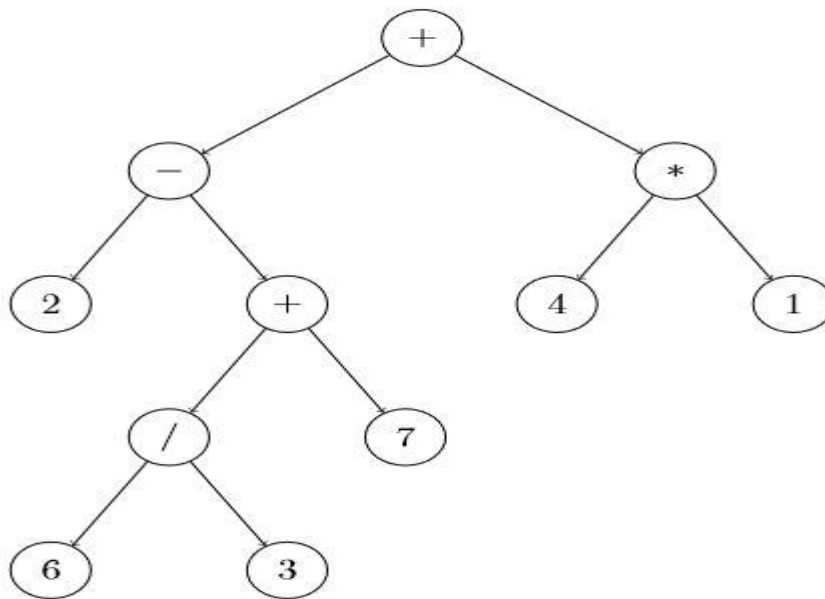

(b) Give the prefix notation for the same expression.

Answer: /   +   21   3   *   6   -   4   2

(c) Give the postfix notation for the same expression.

Answer: 21   3   +   6   4   2   -   *   /

2. For the expression tree below, answer the following questions

(a) Write the expression represented by this tree in infix notation.

Answer: 2 - 6 / 3 + 7 + 4 * 1

(b) Write the expression in postfix notation.

Answer: + - 2 + / 6 3 7 * 4 1

(c) Write the expression in prefix notation.

Answer: 2 6 3 / 7 + - 4 1 * +