

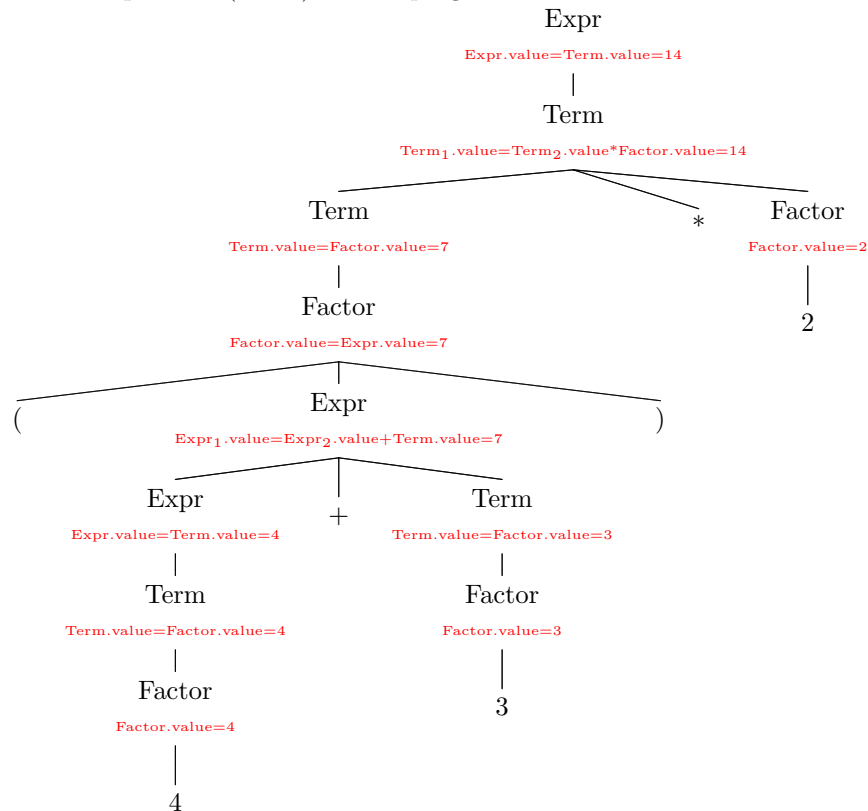


Let be the following attribute grammar:

CFG Rule	Semantic Rule
$\text{Expr}_1 \rightarrow \text{Expr}_2 + \text{Term}$	$\text{Expr}_1.\text{value} = \text{Expr}_2.\text{value} + \text{Term}.\text{value}$
$\text{Expr} \rightarrow \text{Term}$	$\text{Expr}.\text{value} = \text{Term}.\text{value}$
$\text{Term}_1 \rightarrow \text{Term}_2 * \text{Factor}$	$\text{Term}_1.\text{value} = \text{Term}_2.\text{value} * \text{Factor}.\text{value}$
$\text{Term} \rightarrow \text{Factor}$	$\text{Term}.\text{value} = \text{Factor}.\text{value}$
$\text{Factor} \rightarrow (\text{Expr})$	$\text{Factor}.\text{value} = \text{Expr}.\text{value}$
$\text{Factor} \rightarrow \text{integer}$	$\text{Factor}.\text{value} = \text{strToInt}(\text{integer}.\text{str})$

Write a C++ program that asks the user for an arithmetic expression and draws the decorated parse tree for that expression. **example:**

for the expression $(4 + 3) * 2$ the program should draw a tree like



The tree could be drawn in text mode using dashes and vertical bars.