

Homework 8: Trees

cs230
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The purpose of this assignment is to use an expression tree to translate a postfix expression into infix.

Build the expression tree

1. Copy your postfix evaluator from the previous homework into a new directory. If it is not a process object, transform it to that structure, using my solutions as a guide.
2. Type in the Tree class as presented in the book and test it. If you can think of tree helper methods you think you will need, go ahead and write them, testing them as you go.
3. Modify the evaluator so that instead of returning an integer, it returns an expression tree.
4. Print the resulting tree in postorder and confirm that it generates the original postfix expression (or possibly an equivalent one).

Generate infix

1. Create a Translator object that contains a postfix expression and that provides a method named `translate` that returns an equivalent infix expression as a String.

As a rough draft of this method, you can just do an inorder traversal, but then you will have to figure out when it is necessary to insert parentheses to preserve the value of the expression.