

Assignment - 3

Stacks

Stacks – Evaluating Arithmetic Expressions

Write a class `ArithmeticExpressionEvaluator` that evaluates an infix arithmetic expression. Do this in two steps. First, convert the infix expression to a postfix expression: create a filter `InfixToPostfix` that converts an arithmetic expression from infix to postfix. Second, evaluate the postfix expression: write a postfix evaluator `EvaluatePostfix` that takes a postfix expression, evaluates it and prints the value. You must implement your own generic classes that support the `push()`, `pop()`, and `isEmpty()` methods. Your program should print the infix expression, postfix expression, and the final result.