Anthony Trang
Willem Duvenhage

Main Class
        processInput method
                Scan input file
                Read each line and send to convertToPostfix method in Postfix Class
                Save result in postfixArray
        End method

        generateReport method
                Create a postfix report, using data in postfixArray
        End method

        Main method
                Call processInput method
                Call generateReport method
        End method
End Class

Postfix Class

        convertToPostfix method - Receives [] and returns String []
                While end of infix hasn't been reached
                        charReturned = characterCheck()
                        If charReturned != ""
                                postFixString = postFixString + charReturned + " "
                        End If
                End While
                If end of infix has been reached and stack is not empty
                        Return a blank String
                End If
                Return the postFixString
        End method

        characterCheck method - Returns a char
                If char is +
                        Peek at top of stack
                        If char is *, /, ^, (push new char to stack
                        If char is + do nothing
                        If char is - pop from stack and return char
                Else If char is -
                        Peek at top of stack

If char is *, /, ^, (push new char to stack
                    If char is - do nothing
                    If char is + pop from stack and return char
            Else If char is *
                    Peek at top of stack
                    If char is +, -, ^, (push new char to stack
                    If char is * do nothing
                    If char is / pop from stack and return char
            Else If char is /
                    Peek at top of stack
                    If char is +, -, ^, (push new char to stack
                    If char is / do nothing
                    If char is * pop from stack and return char
            Else If char is ^
                    push to stack
            Else If char is (
                    push to stack
            Else If char is)
                    peek at top of stack
                    While char != (
                            add char to character concatenation
                    End While
                    return concatenation of chars
            Else
                    Return char
            End If

            Return "";
    End method
End Class

Stack Class

    Instantiate LList class

    Push method
            If isempty
                    Return null
            Else
                    Return list.addFirst // LList class
    Pop method
            If isEmpty
                    Return null

        Else

                Return list.removeFirst // LList class

Peek method

Isempty method
        Return list.isEmpty // LList class

Clear method
        Return list.clear // LList class