

Data Structures and Algorithms - Assignment 3

1. Write all possibilities to check palindrome. Also do time and space complexity analysis.
2. Implement following algorithms for multi digit numbers
 - postfix evaluation
 - prefix evaluation

Optional

3. <https://leetcode.com/problems/valid-parentheses>
4. <https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string>
5. Paperwork: Convert following examples from Infix to Prefix and Postfix.
 - $K + L - M * N + (O \$ P) * W / U /$
 - $V * T + Q (A + B) * C - (D - E) * (F + G)$
6. Paperwork: Convert following expression to Postfix and Prefix using stack. $5+9-4*(8-6/2)+1*(7-3)$
7. Write a menu driven program to perform operations on linked list. Also provide option for undo and redo. At any moment if you do undo, last operation performed on linked list should rollback. Your application should support at least 5 undo and redo operations.