15B11CI311 – Data Structures

Week 3 (22-27 Aug, 2022)

Q.1. Write pseudo code to reverse a string using Stack, with and without using extra data structure.

Q.2. How will you insert elements from a stack to a doubly linked list and a circular linked list.

Q.3. Compare the reversal of a singly linked list, doubly linked list and a circular linked list in term of number of operations/swaps.

Q.4. How will the elements of a queue be inserted from a stack, using 2 stacks.

Q.5. What are prefix, postfix and infix notations?

Q.6. Convert an infix notation to prefix and postfix notation. Which Data structure is suitable?

Q.7. Solve a given postfix notation using a stack.

Q.8. Given a sequence of parenthesis, check if the sequence is balanced or not.