

# Data Structures and Algorithms - Assignment 3

---

1. Create an array of integers. Reverse the array using stack
2. Implement circular queue using counter method (maintain count of values in queue and use that count to check empty and full)
3. In singly linear list implement following operations.
  - insert a new data after a given data
  - insert a new data before a given data
- Optional
4. Paperwork: Convert following examples from Infix to Prefix and Postfix.
  - $K + L - M * N + (O^P) * W / U / V * T + Q$
  - $(A + B) * C - (D - E) * (F + G)$
5. Paperwork: Convert following expression to prefix and postfix.  $5 + 9 - 4 * (8 - 6 / 2) + 1 * (7 - 3)$