

# CSE2011 - Data Structures and Algorithms

## Assignment – I

L57-58D1 slot – FALL 2021-221

Data Structures: Arrays, Stack, Queue and singly linked List

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1. Implement Stack and realize various operations to be carried out on it.
2. Implement Queue and realize various operations to be performed on it.
3. Create a linked list and perform various operations to be carried out on the linked list.
4. Multiply two matrices of order  $(m \times n)$  and  $(n \times p)$ . If the order of the matrices is other than this, then supply an error message.
5. Compute the inverse of a square matrix of order  $(n \times n)$ . If the matrix is a singular matrix, then supply appropriate error message.

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