

Sardar Vallabhbhai National Institute of Technology, Surat
Department of Artificial Intelligence
Data Structure (AI102)
B.Tech I - II Semester

Assignment-7

Note: Input should be taken from the user

Question 1: Write a C/C++ code to evaluate the Postfix Expression using Stack.

Example:

Input: 34*25*+

Output: 22

Question 2: Implement a queue using a linked list with two pointers: front and rear. Elements can only be inserted via the rear pointer and deleted via the front pointer. The queue has the following basic operation:

- enqueue() – Insert an element in the queue.
- dequeue() – Remove the element from the queue.
- peek() – Return the element at the front node of the queue
- isFull() – Validates if the queue is full or not.
- isEmpty() – Checks if the queue is empty.