Sardar Vallabhbhai Patel National Institute of Technology, SVNIT, Surat
B.Tech I Sem II (Sem-4)
Data Structure (CS102)
LAB Assignment 5

Goal:
- To understand the queue with its operations.
- To write the reusable functions for later usage in this subject.

1. Reversing a Queue using another Queue.
2. Create a system to manage orders in a restaurant using a circular queue. The system should allow customers to place orders, kitchen staff to process orders, and waitstaff to deliver orders to tables, all while efficiently managing the queue of orders with a circular structure.
3. Implement a program that takes a string input and uses a DEQUE (doubly ended queue) to check if the string is a palindrome. The program should utilize the properties of a deque to efficiently compare characters from both ends of the string.