NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA
NH 66, Srinivas Nagar, Surathkal, Mangaluru, Karnataka 575025, India

Assignment-4 on Queue & Deque

1. Write program(s) to implement the following ADTs with minimum of 10 nodes using linked list. You may define your own node structure. The program should work for all the test conditions and must contain the following methods (not limited to):

Queue using Singly Linked List	Deque using Doubly Linked List
enQueue();	enQueueFront(); enQueueRear();
deQueue();	deQueueFront(); deQueueRear();
size();	size();
isEmpty();	isEmpty();
display();	display();

(the .c/.cpp file(s) and output screenshots)

2. Explain the (worst-case) time complexity for all the operations for both **Queue** and **Deque** (hand written).

(10 + 10)