BÀI TẬP THỰC HÀNH CẤU TRÚC DỮ LIỆU VÀ GIẢI THUẬT

LAB MANUAL

Academic Year : **2022 - 2023**

Semester : **III Semester**

Prepared by

MSc. KhangVQH

S. No.	Experiment
1	**SEARCHING TECHNIQUES**
2	**SORTING TECHNIQUES**
3	**SORTING TECHNIQUES**
4	**IMPLEMENTATION OF STACK AND QUEUE**
5	**APPLICATIONS OF STACK**
6	**IMPLEMENTATION OF SINGLE LINKED LIST**
7	**IMPLEMENTATION OF DOUBLE LINKED LIST**
8	**IMPLEMENTATION OF STACK USING LINKED LIST**
9	**IMPLEMENTATION OF QUEUE USING LINKED LIST**
10	**IMPLEMENTATION OF BINARY SEARCH TREE**

WEEK-9

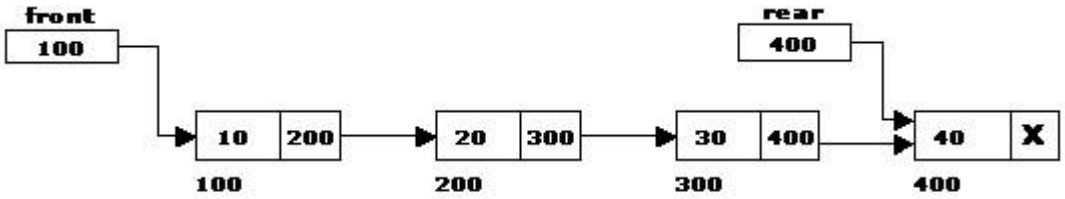
IMPLEMENTATION OF QUEUE USING LINKED LIST

9.1 OBJECTIVE:

a. Write a C program to implement queue using linked list

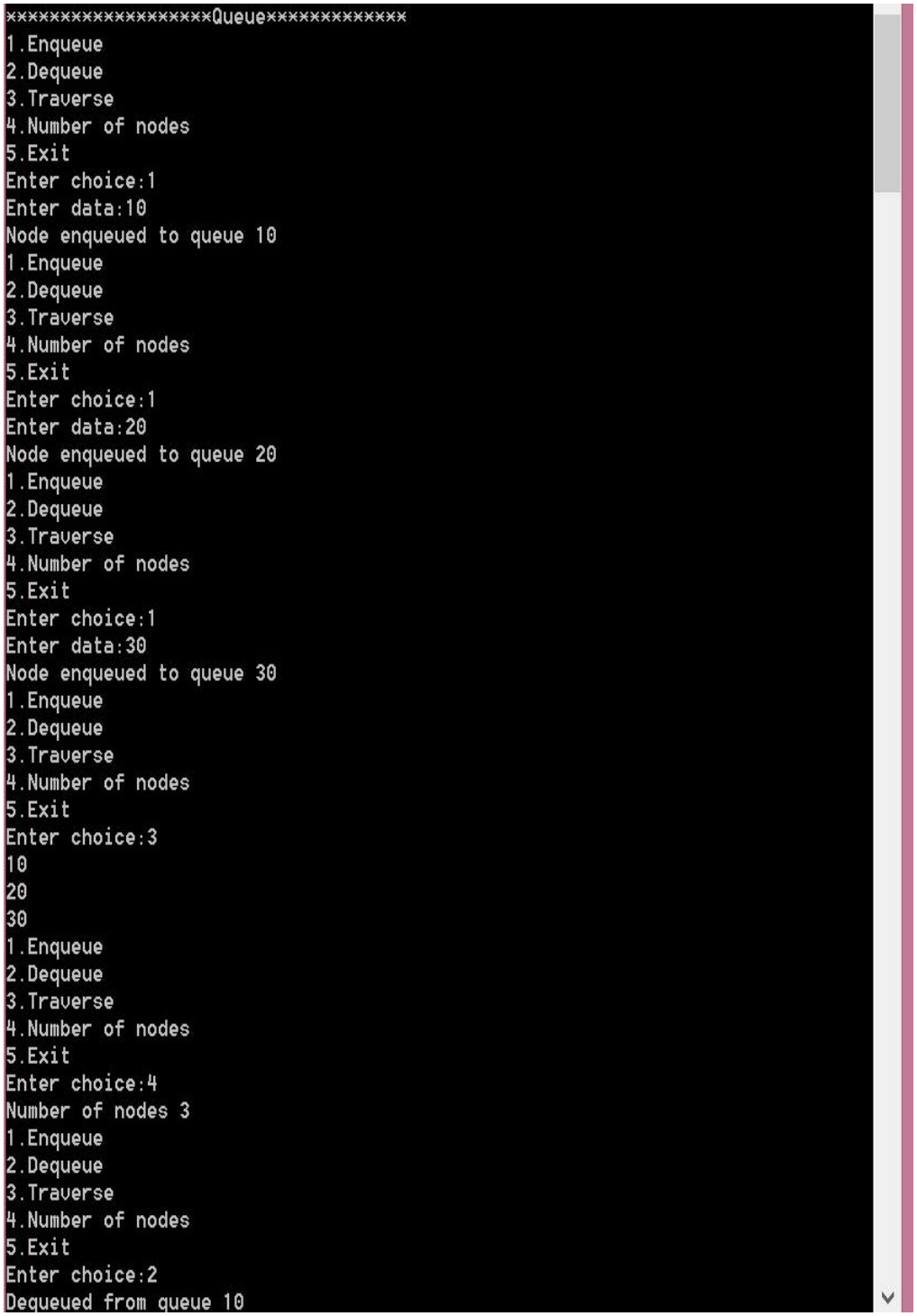
9.2 PROGRAM LOGIC:

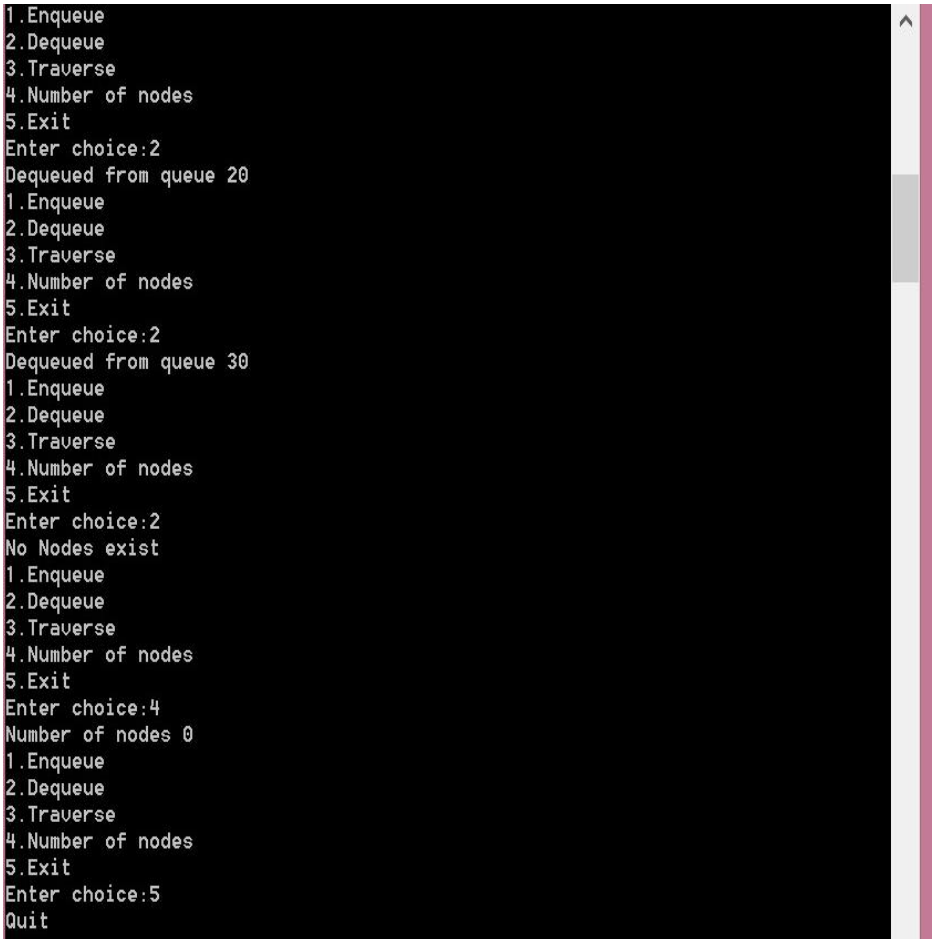
1. QUEUE: Queue is a linear data structure which works under the principle of first in first out. Basic operations: Insertion, deletion, display.
2. Inserion: if newnode ==NULL, display Queue is full. Else reading data and inserting at queue rear.
3. Deletion: if (front==NULL), display Queue is empty .Else printing element at queue front
4. Display: if (front==NULL) ,display No elements in the queue .Else printing the elements from front to rear.



9.3 IMPLEMENTATION:

INPUT/OUTPUT:





9.4 LAB ASSIGNMENT:

1. Write a program to implement Queue operations using linked list.

9.5 POST-LAB VIVA QUESTIONS:

1. What is DEQUE?