Department of Computer Science

Lecture Outline

Data Structures – 4th CSE

Lecture: Queues

All Programming to be done in C language.

Classroom Lectures: **Lecture 13 : Introduction to Queues and Circular Queues** https://youtu.be/JglQFf-80gI **Lecture 14: Types and Application of Queues** https://youtu.be/bbNMVK6KFVM	
1. Queues	• What is a Queue? • FIFO Principle • Dynamic Implementation using Linked Lists • Static Implementation, Disadvantages • Circular Queues • Implementation of Queues using arrays • Imlementation of Circular Queues
2.	•
3. Double Ended Queues	• What is a Double Ended Queue or Deque? • Types - Input Restricted Queues - Output Restricted Queues - Implementing Double Ended Queues using Linked Lists and Arrays
4. Priority Queues	What is a Priority Queue? Types of Priority Queues - Ascending PQ - Descending PQ

5. Applications of Queues	• Multiprogramming • Printing etc
6. Resource Links	• https://www.geeksforgeeks.org/queue-data-structure/ • https://www.tutorialspoint.com/data_structures_algorithms/dsa_queue.htm • https://www.tutorialride.com/data-structures/types-of-queue-in-data-structure.htm • https://www.studytonight.com/data-structures/queue-data-structure