

CM1602 : Data Structures and Algorithms for AI

Tutorial 5

1. Describe Queue, types of Queue and the applications of Queue.
2. Implement a Queue of size 8 using an Array.
 - a. Check if Queue is empty.
 - b. Insert 62,89,32,67,21,39,88,55,94.
 - c. Call Dequeue method 3 times.
 - d. Insert 89.
 - e. Check if Queue is full.
 - f. Discuss the answer for 2.d. and 2.e. (Group Discussion – the reason and how to solve it)

Additional Exercise

3. Implement a Queue using a Linked List.
 - a. Check if Queue is empty.
 - b. Insert 62,89,32,67,21,39,88,55,94.
 - c. Call Dequeue method 3 times.
 - d. Insert 89.