# Rajalakshmi Engineering College

Name: LIRESH NV 1

Email: 241501100@rajalakshmi.edu.in

Roll no: 241501100 Phone: 9840466142

Branch: REC

Department: I AI & ML FA

Batch: 2028

Degree: B.E - AI & ML



## NeoColab\_REC\_CS23231\_DATA STRUCTURES

REC\_DS using C\_Week 4\_COD\_Question 5

Attempt : 1 Total Mark : 10 Marks Obtained : 0

Section 1: Coding

#### 1. Problem Statement

You are tasked with implementing basic operations on a queue data structure using a linked list.

You need to write a program that performs the following operations on a queue:

Enqueue Operation: Implement a function that inserts an integer element at the rear end of the queue.Print Front and Rear: Implement a function that prints the front and rear elements of the queue. Dequeue Operation: Implement a function that removes the front element from the queue.

## Input Format

The first line of input consists of an integer N, representing the number of elements to be inserted into the queue.

The second line consists of N space-separated integers, representing the queue elements.

#### **Output Format**

The first line prints "Front: X, Rear: Y" where X is the front and Y is the rear elements of the queue.

The second line prints the message indicating that the dequeue operation (front element removed) is performed: "Performing Dequeue Operation:".

The last line prints "Front: M, Rear: N" where M is the front and N is the rear elements after the dequeue operation.

Refer to the sample output for the formatting specifications.

## Sample Test Case

Input: 5

12 56 87 23 45

Output: Front: 12, Rear: 45

Performing Dequeue Operation:

Front: 56, Rear: 45

Answer

Status: Skipped Marks: 0/10