

Data Structures Lab



Lab # 06

Circular Singly and Circular Doubly Linked List

Lab Engineer: Hilal Ahmad

Department of Computer Science,
National University of Computer and Emerging Sciences FAST
Peshawar Campus

Table of Contents

1. Circular Singly and Circular Doubly Linked Lists demonstration
2. Tasks

2. Tasks

Task 1: Reverse a Circular Doubly Linked List

Problem: Write a function to reverse a circular doubly linked list. After reversing, the last node should become the head.

Example:

- **Input:** List: 1 <-> 2 <-> 3 <-> 4 (-> 1)
- **Output:** List: 4 <-> 3 <-> 2 <-> 1 (-> 4)

Task 2: Deletion of Odd Nodes from a Circular Singly Linked List

Problem: Write a function that deletes every odd node in a circular singly linked.

Example:

- **Input:** List: 1 -> 2 -> 3 -> 4 -> 5 (-> 1)
- **Output:** 2 -> 4 (-> 1)