# University of Engineering & Management, Kolkata



# **Department of Computer Science & Engineering**

# **DATA STRUCTURE LAB**

Subject Code - CS392

## SESSION- 2018 ODD SEM

#### ASSIGNMENT – IV

# Objective – To implement the concept of Doubly Linked List

# Date of Assignment - 06.08.2018

# **Date of Submission - 13.08.2018**

- 4.1 Write a C program to count number of nodes present in a doubly linked list.
- 4.2 Write a C program to count number of nodes present in a doubly linked list based on some range of data.
- 4.3 Write a C program to delete an element from beginning of a doubly linked list.
- 4.4 Write a C program to delete an element from the end of a doubly linked list.
- 4.5 Write a C program to delete an element after any given position of a doubly linked list.
- 4.6 Write a C program to delete an element before a given position of a doubly linked list.
- 4.7 Write a C program to delete an element after any given data of a doubly linked list.
- 4.8 Write a C program to delete an element before any given data of a doubly linked list.
- 4.9 Write a C program to delete a given element from a doubly linked list.
- 4.10 Write a C program to delete an element from a specific position of a doubly linked list.
- 4.11 Write a C program to repeatedly delete nth element from a doubly linked list.

- 4.12 Write a C program to delete all odd number nodes from a doubly linked list.
- 4.13 Write a C program to delete all even number nodes from a doubly linked list.
- 4.14 Write a C program to store names in a doubly linked list & then delete the name with shortest length.
- 4.15 Write a C program to remove all nodes except for those nodes containing a specified item.
- 4.16 Write a C program to remove duplicate node present from a doubly list.
- 4.17 Write a C program to remove duplicate from a doubly list and update the count field appropriately.
- 4.18 Write a C program to check a name is palindrome or not using doubly list.
- 4.19 Write a C program to create a database with name and mobile number of n user using doubly list. Find the mobile number of any given name.
- 4.20 Write a C program to store a string using doubly list and return the first recurring character.