

AAD1 (CSE2631) LAB EXPERIMENT

Experiment-6

Objective: Implement the Linked-List data structure to solve the following problems.

Practice Questions:

- 1) Create a Singly Linked List and perform Insert, Delete and Search Operations on it.
- 2) Create a Doubly Linked List and perform Insert, Delete and Search Operations on it.

Task list:

- 1) Given a list of integers. Create a linked list such that the linked list will be sorted in ascending order. Display the linked list after considering all the integers in the list. Use a Singly Linked List.
- 2) Given the adjacency matrix representation of an Undirected graph, construct the adjacency list representation of the graph.
- 3) Write a method to add edges to a graph, considering the given adjacency list representation of the graph. Note: It is an extension to Que-2.
- 4) Print the Singly Linked List content in reverse order. Hint: Use recursion
- 5) Reverse the contents of a Doubly Linked List without using recursion.

Note: Two LAB slots are assigned for Linked List in the Lesson Plan. Practice questions may be done in the first lab slot of the Linked List. In the second lab slot of Linked List, the Task List may be given to complete and write in the Lab report.