SET213 – Data Structures & Algorithms

Experiment # 10

Experiment Title

Linked List - II

Assessment of CLO(s): IV

Performed on 13-12-2024

Student Name	
Roll No.		Group	
Semester		Session	

Total (Max)	Criteria 1 (2.5)	Criteria 2 (2.5)	Criteria 3 (2.5)	Criteria 4 (2.5)	Total (10)
Marks Obtained					
Remarks (if any)					

Experiment evaluated by

Instructor's Name	Engr. Muhammad Asad Husain		
Date		Signature	

Department of Engineering Technology
(UIT University)

Course Code: SET213   **Course Title: Data Structures & Algorithms**   **Course Credits: 3+1**

Session: Fall 2024

Rubric for assessment criteria to perform experiment number 10.

Level / Criteria	UNSATISFACTORY 1	COMPETENT 2	PROFICIENT 3	DISTINGUISHED 4
Capability of writing algorithm/ Procedure	None of the steps are implemented of an algorithm.	Few steps are implemented correctly of an algorithm.	Most of the steps are implemented correctly of an algorithm.	All the steps are implemented correctly of an algorithm.
Capability of writing Program	Programs not completed.	Completeness of code, consistent variable naming and unformatted.	Completeness of code, inconsistent variable naming and well formatted.	Completeness of code, consistent variable naming and well formatted.
Completion of target in Lab	25% target has been completed	50% target has been completed	75% target has been completed	100% target has been completed
Output	None of the outputs are correct.	Few outputs have been found correctly.	Some of the outputs are correct and well formatted.	Most of the outputs are correct and well formatted.

Practical Objective(s):

    i.   Insertion and deletion in a linked list
   ii.   Searching an item in a linked list

Do It Yourself:

1. (a) Define a structure named as "computer", which has these fields:
   - Category (Workstation, Laptop, Tablet, etc.)
   - Brand name (e.g. Intel, HP, Lenovo, etc.)
   - RAM size in GB (1, 2, 4, 8, etc.)

   (b) Add another field which will point to the address of the next node.

2. Write a program which creates a linked list each of whose nodes is a structure of type computer (created in task 1).
   (a) Insert three computer nodes at the front of this linked list.
   (b) Delete a node from the end of the linked list.