COMSATS University Islamabad, Vehari Campus

Department of Computer Science

Class: BSCS-SP22-4B   **Date: 23 Oct 2023**

Subject: Data Structure & Algorithm Lab   **Instructor: Yasmeen Jana**

Max Marks: 25   **Reg. No:**

Max Time: 90 Minutes

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Activity 1:

Write a C++ code to create a singly linked list using "SLL()" function and Remove duplicates from an unsorted linked list as RemoveDup() function and display linked list with unique values.   **(15)**
For Example:

Input: linked list = 12->11->12->21->41->43->21
Output: 12->11->21->41->43.


```
Original Linked List: 1 2 3 2 4 1 1
Linked List with Duplicates Removed: 1 2 3 4
```

Hint:
Use two loops, Outer loop is used to pick the elements one by one and the Inner loop compares the picked element with the rest of the elements.

Activity 2:

Write a C++ code to create a Queue using a linked list. The code should contain functions for Enqueue(), Dequeue(), and Display().   **(10)**