

Roll No. [REDACTED]

National University of Computer and Emerging Sciences, Lahore Campus

Section

BSSE 3A



Course: Data Structures  
 Program: BS(CS)  
 Duration: 15 Minutes  
 Paper Date: 9 Nov 2021  
 Section: A

Course Code: CS 201  
 Semester: Fall 2021  
 Total Marks: 10  
 Exam: Quiz 2

Instruction/Notes: Solve the exam on this question paper.

Assume you are given a Doubly link list class

Question1(10 marks): Write a recursive function to DLL class that returns true if the doubly link list is a palindrome. Think carefully about the input parameter of your function IsDLLPalindrome

```

void Wrapper ()
{
    Node<T>* ptr1 = Head;
    Node<T>* ptr2 = Head ptr1 Head;
    if ( Is DLL Palindrome (ptr1, ptr2) == true )
        cout << " Palindrome ";
}

bool Is DLL Palindrome ( Node<T>* ptr1, Node<T>* ptr2 )
{
    if ( ptr2 == 0 )
        return true;

    else
        return Is DLL Palindrome ( ptr1, ptr2->next );

    if ( ptr1->data == ptr2->data )
        return Is DLL Palindrome ( ptr1->next, ptr2->previous );
    else
        return false;
}
  
```

This part won't execute because of return statement above.