

Lab Quiz: Monday, 21 November 2016

Max Marks: 160

Deadline: Friday 25 November 11:59 PM

Submission Link: dsalabbcfs15@gmail.com

Instructions:

- Do not consult solution and descriptions of your code with your peers.
- In case of cheating and plagiarism a grade F will be awarded to student in particular course.
- Indent your code properly.

Perform following operations using single linked list. [70]

CreateSingleLinkedList //Create a single linked list of 5 nodes.

InsertAt //add a node at ith position in single linked list

Sort //sort single linked list

compareLinkedList // compare two linked list if they are exactly same return true

reverseLinkedList //reverse the order of nodes in single linked list

Display //display element in single linked list

Push //push stack element

Perform following operations using double linked list. [40]

CreateDoubleLinkedList // create double linked list of 5 nodes

deleteNode // delete ith node from double linked list

Display // display element/nodes in double linked list

Enqueue //add an element in queue

Perform following operations using recursion [30]

isPalindrome //check either the given string is palindrome or not

Fibonacci //compute and display first 20 Fibonacci series

findElement // recursively find an element in arr1

Implement following sorting algorithm [20]

selectionSort //sort arr1 using selection sort

QuickSort // sort arr1 using arr2

int arr1[16]={5,14,10,27,45,30,50,7,20,40,37,43,10,14,50,53};

Note: Place all your source files in a folder and send its Zip file named as your roll number.