**KATHMANDU UNIVERSITY**

**Department of Computer Science and Engineering**

**Dhulikhel, Kavre**



Subject: COMP 202

Lab Report. 2

SUBMITTED BY SUBMITTED TO

Name:- Isha Adhikary Dr. Rajani Chulyadyo,

Roll.no:-04

Group:- C.E.

Level:- U.N.G/2nd  Year/1st Sem

Date of Submission: 11/12/2019

(a) isEmpty(): Returns true if the list is empty, and false otherwise

(b) addToHead(data): Inserts an element to the beginning of the list

(c) addToTail(data): Inserts an element to the end of the list

(d) add(data, predecessor): Inserts an element after the given predecessor node

(e) removeFromHead(): Removes the first node in the list

(f) remove(data): Removes the node with the given data

(g) retrieve(data, outputNodePointer): Returns the pointer to the node with the requested data

(h) search(data): Returns true if the data exists in the list, and false otherwise

(i) traverse(): Displays the contents of the list

Ans: source code:

Linkedlist.cpp

Output of the following program is:

16 15 8 9 18

1. Implement stack and queue data structures using linked lists. :

Ans:- Source Code:

Queuelinkedlist.cpp

Stacklinkedlist.cpp

Output of the following code is:

For queue:

20

For stack:

20 30

20