**CSc 2720 - Data Structures: Lab 6**

**Deadline to Submit: [2/19/2021] [11:00pm] ET(US)**

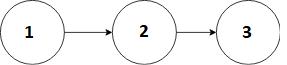
Failure to submit will result in a zero for this lab.

**Problem 1 [100 points]:**

Given pointer to the head node of a linked list, the task is to reverse the linked list. You need to reverse the list by changing links between nodes.

//Helper Code is in next page:

**Example:**  A random example of a linked list -- [1,2,3], which looks like the following:



**Output:** List After Reversal: 3 2 1

public class LinkedList {

static Node head;

static class Node {

int data;

Node next;

Node(int d) //Node Constructor

{

data = d;

next = null;

}

}

/\* Function to reverse the linked list \*/

Node reverse(Node node)

{

//Write Your Code Here

}

// prints content of double linked list

void printList(Node node)

{

//Write Your Code Here

}

public static void main(String[] args)

{

LinkedList list = new LinkedList();

list.head = new Node(1);

list.head.next = new Node(2);

list.head.next.next = new Node(3);

list.head.next.next.next = new Node(4);

System.out.println("Given Linked list");

list.printList(head);

head = list.reverse(head);

System.out.println("");

System.out.println("Reversed linked list ");

//Write Your Code to print the linked list Here.

}

}