**Course: Data Structures and Algorithms**

**Lab 05**

**Circular Linked List**

**Task 1:**

Implement stack by linked memory provided you already have Node class and Single Linked list class namely Node and LinkedList respectively. Concept is: reuse the already build methods in LinkedList class.  
class Node{  
// already done  
}  
  
class LinkedList{  
// already done  
}  
  
  
class LinkedStack{  
//instance variable for top  
//instance variable for keeping record of number of elements  
  
//pop()  
//push(v)  
//top  
//isEmpty()

}

**Task 2:**

Implement circular linked list by using following methods.

Insert(int d);

Delete(int loc)

Print()

**Task 3:**

Implement dynamic Queue class as following  
// Queue implemented by linked memory  
class LinkedQueue{  
Node front;  
Node rear;  
int n;  
newNode// create new node   
Node dequeue(){  
//add your code here  
   
return null;  
}  
boolean enqueue(int v){  
//add your code here  
   
return true;  
}  
int sizeOfQueue(){  
//add your code here  
}  
   
boolean isEmpty(){  
return front==NULL;  
}  
   
boolean isFull(){  
return false  
}  
   
}//end of LinkedQueue class