Kadir Has University

Department of Computer Engineering

CE 242 - Data Structures and Algorithms

Spring 2010 – Ahmet Ardal

Lab Assignment 4

1. Implement the insertLast() method of the LinkedList class. inserLast() should create a ListNode with its data parameter, and insert that node to the end of the list.

   Method signature:
   ```
   public void insertLast(int _data)
   ```

2. Implement the reverseListIter() method of the LinkedList class. It should create a new LinkedList that contains all the data the original list contains but in reverse order and it should return the newly created list.

   Method signature:
   ```
   public LinkedList reverseListIter()
   ```

3. Implement the reverseListRec() static method of the LinkedList class. It should create a reverse copy of the linked list whose first node is passed to the function and return this new reverse copy of the list. It should perform its job by recursion.

   Method signature:
   ```
   public static LinkedList reverseListRec(ListNode head)
   ```

   Note: While implementing the methods above, write your code into the method body of the corresponding method definition in the Java source file named “LinkedList.java”, which is provided on the Blackboard. Also a main() function with some test code is available in the file “LinkedListTest.java” for you to test the functions.