Program 11 – Linked lists

1. Add the operation divideMid to the class linkedList as follows:

//This operation divides the given list into two sublists

//of (almost) equal sizes.

//Postcondition: first points to the first node and last

// points to the last node of the first

// sublist.

// sublist.first points to the first node

// and sublist.last points to the last node

// of the second sublist.

Consider the following statements:

unorderedLinkedList<int> myList;

unorderedLinkedList<int> subList;

Suppose myList points to the list with elements **34 65 27 89 12** (in this order). The statement:

myList.divideMid(subList);

divides myList into two sublists: myList points to the list with the elements **34 65 27**, and subList points to the sublist with the elements **89 12**.

1. Write the definition of the function template to implement the operation divideMid. Also, write a program to test your function.

Include your UML.