

COMP 2011

Lab and Tutorial Five (Total Marks: 100)

Deadline: 23:59, 23 Oct. 2014

Download the linked list Java program from the Blackboard. In main() of LinkListApp, add code to implement the following functions: If theList is not empty, two new lists will be generated by equally dividing theList in the middle (if the number of links is odd, then the first part has one more link than the second part). Note that theList should not be changed after your code is executed.

You should test your code with the following four cases: (1) theList is empty; (2) The number of links in theList is odd; (3) The number of links in theList is even; (4) theList has only one link.

(Hint: You can first move all links to a temporary linked list, and then insert links back to the original list, and the first and second lists correspondingly)

What to submit:

- 1) The report that records the output of your program.
- 2) The java source code of your program.