# Lecture Notes, Tues May 23

## Linked List questions

1) In the **List** class, implement a method called **walk\_to(int i)** that returns a pointer to the i-th node in the list. The first node is 0, the second is 1, the third is 2, and so on. Assume **i** is a valid index. Make **walk\_to** **private**: we don’t want **List** users getting pointers to nodes (they could mess up the node!).

2) Implement the private method **remove\_after(Node\* p)**, which deletes the node *after* the node that **p** points to. Assume **p** points to a valid node in the list. Note that it can’t remove the first element of the list!

3) Implement the **public** method **remove(int i)** that deletes the i-th node in the list. Assume **i** is a valid index.

4) Re-implement the **size()** method using **recursion** (and no loops). How does the recursive implementation compare to the non-recursive one?