

Kerry Ojakian's CSI 33 Class
Class Assignment #4

1. Make a diagram of a Linked List with the elements 3, 4, 1.
2. Make a diagram to show ALL the steps for inserting a 7 between the 3 and the 4.
3. Make a diagram to show ALL the steps for inserting a 9 at the beginning of the list.
4. You now have the list: 9, 3, 7, 4, 1. Write out the process for searching for 7. Write out the process for searching for 12.
5. Write a link list in Python, like our C++ version.

For the next problems, a “Tailed Linked List” means the usual linked list with an extra pointer that should always be maintained pointing at the last element in the linked list. When indicating how the links are modified take some care to indicate the order in which you should modify the links.

6. Make a diagram of a Tailed Linked List with the elements 3, 4, 1.

7. Make a diagram to show ALL the steps for inserting a 2 between the 4 and the 1.

8. Make a diagram to show ALL the steps for inserting a 7 at the end of the list, after the 1.

9. Use a diagram to show the steps for deleting the last element in the list.

10. Make a diagram of a Tailed Linked List that contains just the element 99.

11. Make a diagram of an empty Tailed Linked List.