CS 229 HW 2
Linked List Spiral

Hurray, more circles. Once again the drawing part is handled for you, and some basic functionality of the data structure: click the color buttons at the top to add a new color to the end of the Linked List. Linked List nodes draw in a spiral, the lines between them show how the nodes are connected. The click handling of the Linked List Nodes is also handled for you, but it just prints the color of the Node you clicked to the console. The display updates completely to match the underlying list when repainted, you probably don't need to change anything about the display functionality. You can certainly change or rewrite anything if you want to.

Implement these functions:
- Left clicking a Linked List Node removes it from the list
- Right clicking one of the top buttons removes ALL occurrences of that color from the list.
- Right clicking a Linked List Node selects it and prepares a "special" operation:
  - Extra credit (5%) Visually indicate the selected Node (a different outline is fine)
  - Left clicking a top button now inserts just after the selected Node (instead of at the end)
  - Right clicking a top button now inserts just before the selected Node
  - Right clicking another Linked List Node executes a "cut", removing ALL Nodes between the first (i.e. selected) and second one right clicked in the list.
    - Note the first one might be before or after the second one in the list! They don't have to be clicked in order!
  - Right clicking anywhere else ends "special" mode and deselects the Node.
    - Note: It's up to you if "special" mode ends after the other operations finish
- Pressing "space" inverts the list: the Tail becomes the Head, the Node just before the tail is now the second Node, and so forth.
- Extra credit (5%) Start at the head. Pressing the left and right arrow keys moves forwards/back in the list. The background color is set to the color of the current Node.

For this assignment, you must use a Linked List written from scratch, you can't use the one built into Java. The starter includes some basic functionality.

As always, up to 5% extra credit for exceptional documentation.