could someone help clarify how we would implement the displayBST function into the displayVBST and displayRBT? I am confused since displayBST displays the nodes in level order (and so you could display the parent as well and if it's a leaf or root or whatever). But you essentially do not know if you are using VBST or RBT so you do not know if you need to print extra information that's only unique to a certain tree, like coloring with RBT or the frequency count that is NOT given in the BST struct.

The vbst module, for example, sends to bst a value display function that knows how to print the key and the frequency.

Still not sure I understand. Does this mean that the BST display function should just call bst->display and all the code for how to print should be written in the display functions that are passed to BST?

The way I have it, and someone please tell me if I'm doing it wrong, is like this:

The displayVBST() function just calls displayBST(). displayBST() prints everything, except the key of the node ("a", "b", "c", etc) and the frequency, then calls bst->display(fp, node->value) and that prints the the key and the frequency (and the color if it rbt)

^ correct.
That is why you need to pass a special display function to the bst constructor that knows how to display vbstValues. vbstValues wrap the original string (or whatever) value with a frequency count.

Subject: Re: displayBST used by VBST and RBT
Posted by cdyancey on Tue, 07 Mar 2017 15:53:57 GMT
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Are the quotes around the word or phrase printed from the tree’s display function or bst.c? Seems like it would be easiest to have it print from the custom display, but I ask because when bst.c is swapped in testing that could effect whether my code will print the correct number of quotes.

Subject: Re: displayBST used by VBST and RBT
Posted by bmbaker1 on Tue, 07 Mar 2017 16:25:06 GMT
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My display quotes are printed in displayString function from the string module.

Subject: Re: displayBST used by VBST and RBT
Posted by lusht on Wed, 08 Mar 2017 19:05:12 GMT
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Bst can't print quotes, since it doesn't know what kind of values are being stored. For that matter, neither does vbst or rbt.