I'm confused on implementing the statistics functions. For generic bst.c, the stats that can be computed are the number of nodes, min and max height. For vbst.c, you can additionally display the number of words/phrases. It would be simple to write the statistics functions separately in each class, but if the replaced files depend on calling from the generic bst.c, I'm not sure how it would work. Currently, the expected output for vbst.c statistics function would be:

Nodes: x
Words/Phrases: y
Minimum depth: z
Maximum depth: a

But if bst.c displays the same thing, I don't know how I could call the statisticsBST function from within statisticsVBST and achieve the desired result. It's simple if vbst isn't dependent on bst though.

I meant for vbst and rbt to piggyback on bst. So the correct order of statistics should be:

Words/Phrases
Nodes
Minimum depth
Maximum depth

I'll update the spec.

What about when displaying a node's information during displayBST vs displayVBST? The current order is an equals sign if the node is a leaf, followed by //known by bst the node value, followed by //known by bst a dash and the frequency count (if the count is greater than one), followed by //not known by bst a -R if the node is colored red and a -B if it is colored black, followed by //not known by bst a parenthesized display of the parent's value and color, followed by //partially known by bst a - if the node is the root, a -l if the node is a left child, and a -r otherwise //known by bst
When calling displayBST, for each level, you print a space, possibly print an equals sign, call the
display function for the node to display its value, and then not have the frequency count or the
other things, but then finally the child/root identification. It seems displayVBST couldn't use that
function since it displays all levels with that info first, no matter the order; so should it just
implement its own function, and not depend on displayBST (they will look similar though)?

Subject: Re: Statistics Dependent on BST Stats?
Posted by lusth on Tue, 28 Feb 2017 12:17:52 GMT

The display function sent to the bst constructor should know how to display frequency count (and
color). If you copy code in this assignment, you will surely fail some tests.