In the instructions for assignment 2, it states:

Quote:
The tree portion of your code should be composed of three modules: bst.c, vbst.c, and rbt.c.

The bst module should implement the following functions:
insert find swapToLeaf prune

Question 1:
What is the purpose of the vbst.c module? I get that bst.c holds the binary search tree stuff, and rbt.c holds the red-black tree stuff. I am at a loss as to what the 'v' in vbst.c might refer to.

Question 2:
Why would the swapToLeaf and prune functions be implemented in bst.c? Unless I'm taking crazy pills, a simple binary search tree does not prune or swap leaves. I would imagine those two functions should be in rbt.c, or vbst.c... Depending on the answer to question 1.

I'm guessing that the answers are as obvious as the first few questions I asked about assignment 1, but they are flying over my head right now.

Edit: Changed the title to something less self-belittling.

---

Note that I am not quite done yet, but in this project we are going to overcome (or at least try to overcome) the fact that C does not have inheritance. The bst module will hold all things common between vanilla binary search trees (vbst) and red-black trees (rbt).

SwapToLeaf followed by prune is a time-honored way to delete a value from a search tree.

---

The instructions state that the vbst and rbt modules will be able to store frequency and color, but the included rbt.h file doesn't have an rbtNode. Are we to include the frequency/color parameters in the bstNode or is the rbtNode omitted so we write our own?
I have a vbstnode as a private structure in vbst.c. But I have yet to figure out how to print the information with a displayFunction inside of vbst... It feels like I am on the right track, but also feels as though I am way off. I would like clarification on this as well.

As I said in class and the assignment spec, create vbst and rbt value objects that wrap the generic values. The wrapped values add additional fields, like count, color, display, compare, etc. Send these glorified value objects to be inserted into the bst tree.