

COP 3502 Suggested Program Edits/Questions: AVL Trees/Tries (Week 11 Programs)

- 1) Create your own tests for the avltree.c to ascertain the experimental run time for searches and deletes, as well as the height of the tree compared to the number of nodes in the tree.
- 2) Research how single and double rotations work. Rewrite the avltree.c to utilize this system of rebalancing instead of the ABC method. (Note: This is pretty darn time consuming, but doing this exercise will ensure that a student truly understands pointers and AVL trees.)
- 3) Rewrite the insert function in mytrie.c **iteratively**.
- 4) Add code to either mytrie.c or mytrie2.c to count and maintain the number of nodes in the trie.
- 5) Edit the solution to maxprefix.c to print out the word that has the maximum number of prefixes that are also words. (This is a non-trivial edit!)