Cse332 Worksheet Week 3

1. 1. Starting with an empty AVL tree, insert the following values: 37, 12, 18, 40, 30, 43, 24, 29, 21 & 19. Draw the tree after each insertion (after the rotations are complete).
   2. Now delete 12, 19 and 18, in that order.
   3. For AVL insertion, we only have to perform one rotation (either single or double), if any. For AVL deletion, we may need to do more; why?
2. BST vs. AVL
   1. A. Give an ordering of 7 insertions into an empty BST tree that results in the worst-case shape (one long list).
   2. Now insert those same elements, in the same order, into an empty AVL tree and draw the result.
   3. List 2 advantages of a regular BST over an AVL tree.