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For: CS345 Lab1
Writeup

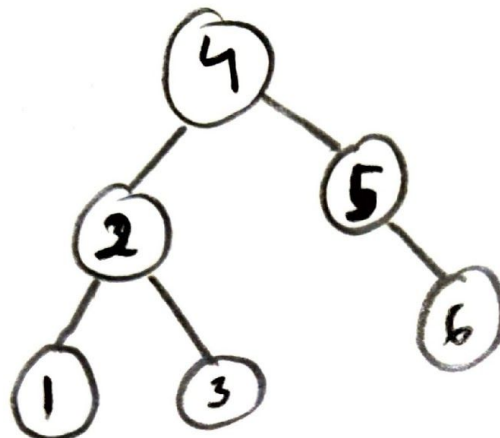
Write up #2a:

Advantage: AVL Tree always balances itself, therefore it will make sure that the search method will operate in $O(\log N)$.

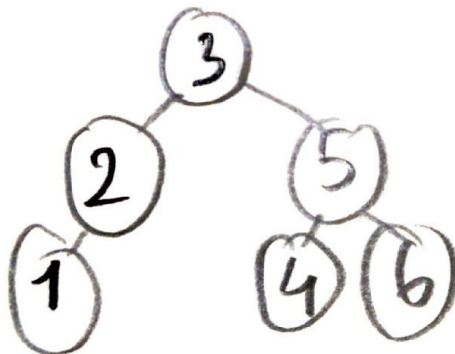
Disadvantage: Insertion and Deletion will be slow due to a lot of pointer changes and rotation that happens every time insertion/deletion is called.

Writeup #2b:

Insert 1 2 3 4 5 6



Insert 6, 5, 4, 3, 2, 1



#Writeup 3b

Since AVL Tree is a self-balance tree, the look-up time of AVL will always have the worst case of $O(\log N)$. Therefore, AVL tree is extremely useful for cases where we need to do a lot of look-up (especially in database). Therefore, I used the old example from Lab1 to demonstrate and prove how the case can be more effective with using AVL.