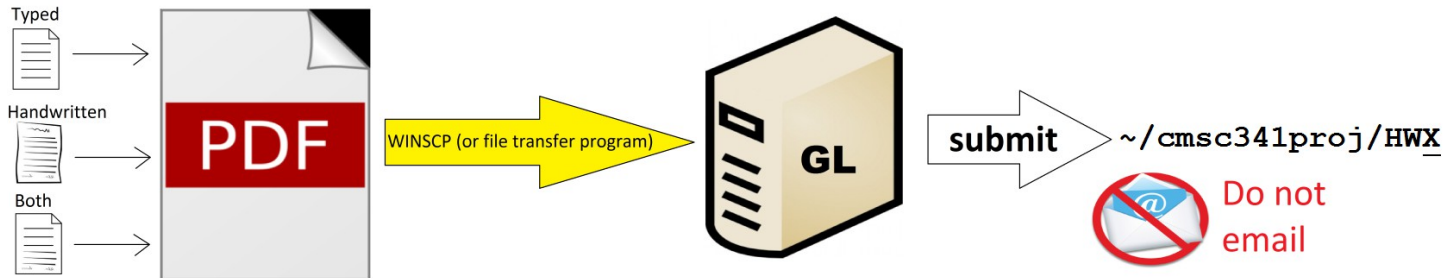


Introduction to Trees

Name:
Section:
HW #:
Version:
Username:



To see how this is done, watch the video [here](#).

It is HIGHLY suggested that this is completed by typing or using a drawing tool for your answer. A very simple application that will be help in drawing BSTs and might be helpful in other classes is JFlap "thin". It can be found here: <http://www.jflap.org/jflaptmp/>. (Mid-way down the page). Take a look at my YouTube video on using it. (<https://www.youtube.com/watch?v=PAynFSleNmU&index=2&list=PLC7fNkE1QpIYMTZMEJgfGdGm5AG2xq4bH>) While the overall goal in the video is different, it is easy to relate that to drawing a BST. Notice that you will be able to save you drawing in many graphic options (.bmp, jpg, etc...)

Insertion

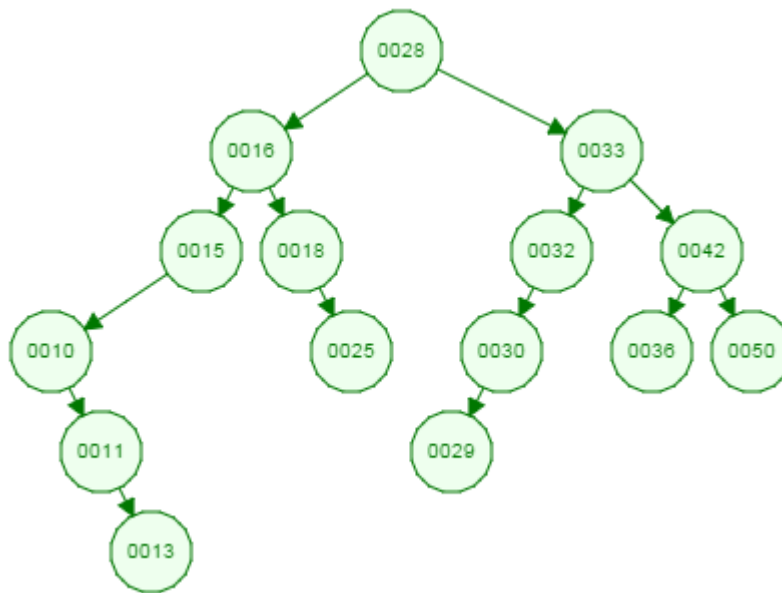
1. Insert these numbers into a Binary Search Tree, 27 3 7 6 16 23 41 Draw what the tree would look like after each addition and explain why it looks this way for full credit.

Inserted	What the tree looks like	Explain what happened
27		...
3		
7	...	
6		
...		

Searching

1. Using the same tree above, show each step the algorithm takes as it searches the tree in order to find the value 6.

Deletion

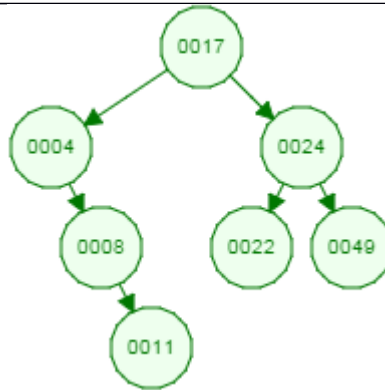


For each of the problems below, use the same tree above. You will be given a node # to delete. Show what the tree will look like AFTER the complete deletion and why the tree looks like this as a result.

# to delete	draw final tree after deletion	why does it look this way?
2. 36		
3. 33		
4. 18		

Pre/In/Post

5. Please determine the order using the given tree below.



Pre-Fix Order	In-Fix Order	Post-Fix Order

Please write your username, instructor and version on your answer sheet!!!

Please follow the HW file naming guide in Blackboard/Homeworks