Data Structures 11/14/2016

0145-343-001

Note Taker: Jai Punjwani

ANNOUNCEMENTS

* QUIZ – Wednesday 11/16/2016 (binary tree traversal, general tree traversal, tracing binary tree program)
* Next HW: <http://home.adelphi.edu/~siegfried/cs343/343hw8.html> (inventory using a binary tree) – due November 24th

Notes:

PowerPoint: <http://home.adelphi.edu/~siegfried/cs343/343l6.pdf>

Topic: Review

Note that a forest is a collection of (general) trees. To traverse we start leftmost and top, and progress to the right and then to the bottom, traversing each tree in the forest.

**Binary Tree**

Preorder: root, left, right

Inorder: left, root, right

Postorder: left, right, root

**General Tree**

Preorder: root, son, next (very standard way of traversing, top to bottom, left to right)

Inorder: son, root, next

Postorder: son, next, root (note this is tricky. study examples carefully)

Ex of son – direct descendants of a given node

Ex of next – the next brother of a given node (so if root A has a tree, and root J is next to it, once we traverse A we go to J).