

CP2410 Practical 06 - Trees

1. (R-8.1) The following questions refer to the tree of Figure 8.3.
 - a. Which node is the root?
 - b. What are the internal nodes?
 - c. How many descendants does node cs016/ have?
 - d. How many ancestors does node cs016/ have?
 - e. What are the siblings of node homeworks/?
 - f. Which nodes are in the subtree rooted at node projects/?
 - g. What is the depth of node papers/?
 - h. What is the height of the tree?

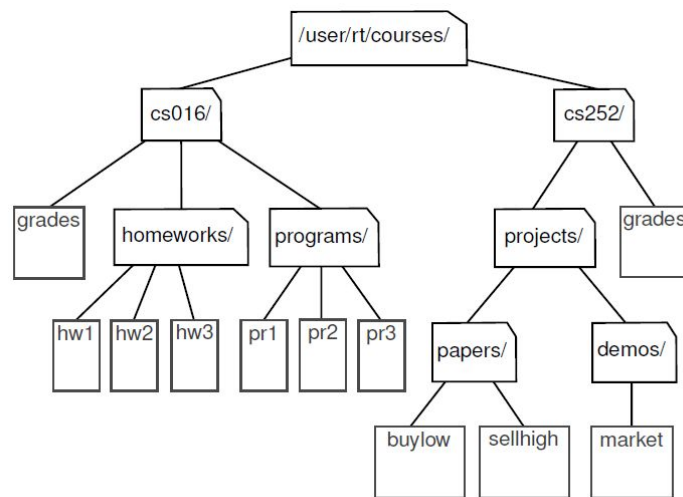
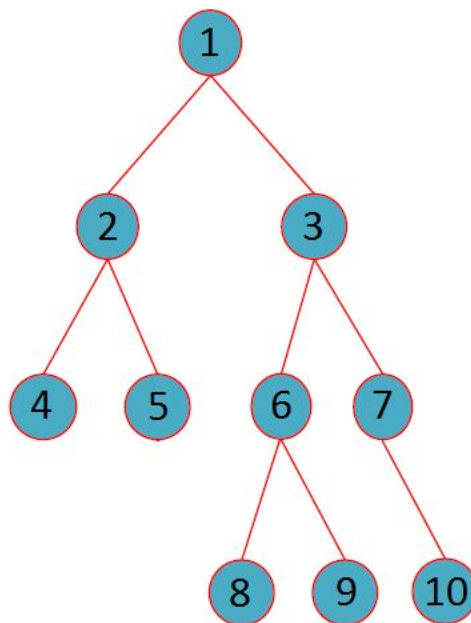


Figure 8.3: Tree representing a portion of a file system.

2. For the following tree, demonstrate (by hand) the output of:
 - a. Inorder traversal
 - b. Preorder traversal
 - c. Postorder traversal



3. Using `LinkedBinaryTree` (ch08/linked_binary_tree.py), recreate the tree above, and use the various traversals to check that your outputs for question 2 were correct.