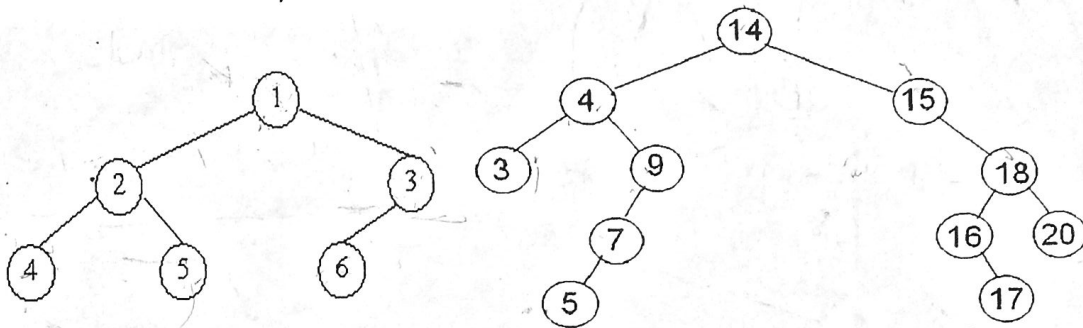CSC 236 - Lab 6 (2 programs + EC) trees

1. Given the two binary trees below:

Write a method called swapSubtrees, which swaps all of the left and right subtrees in the above binary trees. Add this method to the class BinaryTree and create a program to test this method for these 2 trees. Show the original trees and the resulting trees.

Note: To test your algorithm, first create a binary search tree.

2. Start with an empty heap, and enter ten items with priorities 1 through 10. Draw the resulting heap.

- Now remove three entries from the heap that you created in the above exercise. Draw the resulting heap.

Extra Credit:

Write a method called singleParent, which returns the number of nodes in a binary tree that have only one child for the 2 trees given in problem #1. Add this method to the class BinaryTree and create a program to test this method.

Note: To test your algorithm, first create a binary search tree.