

CSC 212 Tutorial # 8

Binary Trees

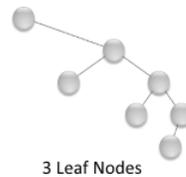
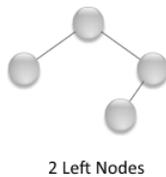
23/11/2014

Important: This tutorial has an online part, which you should complete on LMS (tutorial section). The deadline for this task is Sunday October 26th at midnight.

Problem 1

Write the method LeafNodes part of the Binary Tree ADT. It should return the number of leaf nodes in the tree.

Examples:

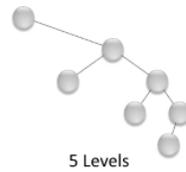
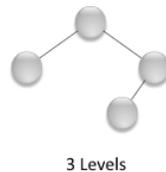


Method: `public int LeafNodes()`

Problem 2

Write the method TreeHeight part of the Binary Tree ADT. It should return the height of the tree. The height of the tree is the longest path from the root to a leaf node.

Example:

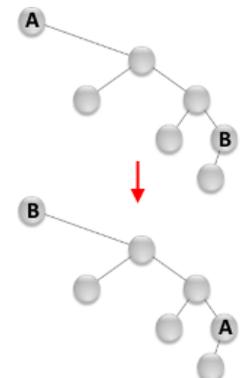
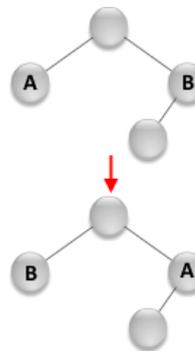


Method: `public int TreeHeight()`

Problem 3

Write the static method SwapMost that takes a Binary tree `bt` and swaps the data of the left most node with the right most node.

Example:



Method: `public static <T> void SwapMost(BinaryTree<T> bt)`