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Assignment 3

CPSC 2150

4)

a)

Time complexity:

genData() = O(n)

makeBST() = O(nlogn)

printBST() = O(n)

height() = O(n)

remove() = O(logn)

mergeBST() = O(m+n) => m is the number of nodes in the first bst, n is the number of nodes in the second bst

InfixPostfixExpr() = O(n)

infixExprTree() = O(n)

b)

Space complexity of mergeBST() = O(n)