**EE599 HW5**

**Runtime analysis**

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1. **Find Maximum Depth**

**一張含有 螢幕擷取畫面, 文字 的圖片

自動產生的描述**

Basically, I use Q2 Inorder to find my Height of tree.

Therefore, the time complexity of Inorder is O(n)

Since the time complexity of DFS in a graph G(E,V) is T(n) = O(E+V), which E represents the edges and V represents the vertices. BST is also a graph, therefore T(n) = O(n+(n-1)) = O(n)

1. Inorder, recursive and non-recursive

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自動產生的描述一張含有 螢幕擷取畫面 的圖片

自動產生的描述

Recursive and non-recursive will visit every node, until it visit all the nodes.

Therefore, it takes linear time, T(n) = O(n)