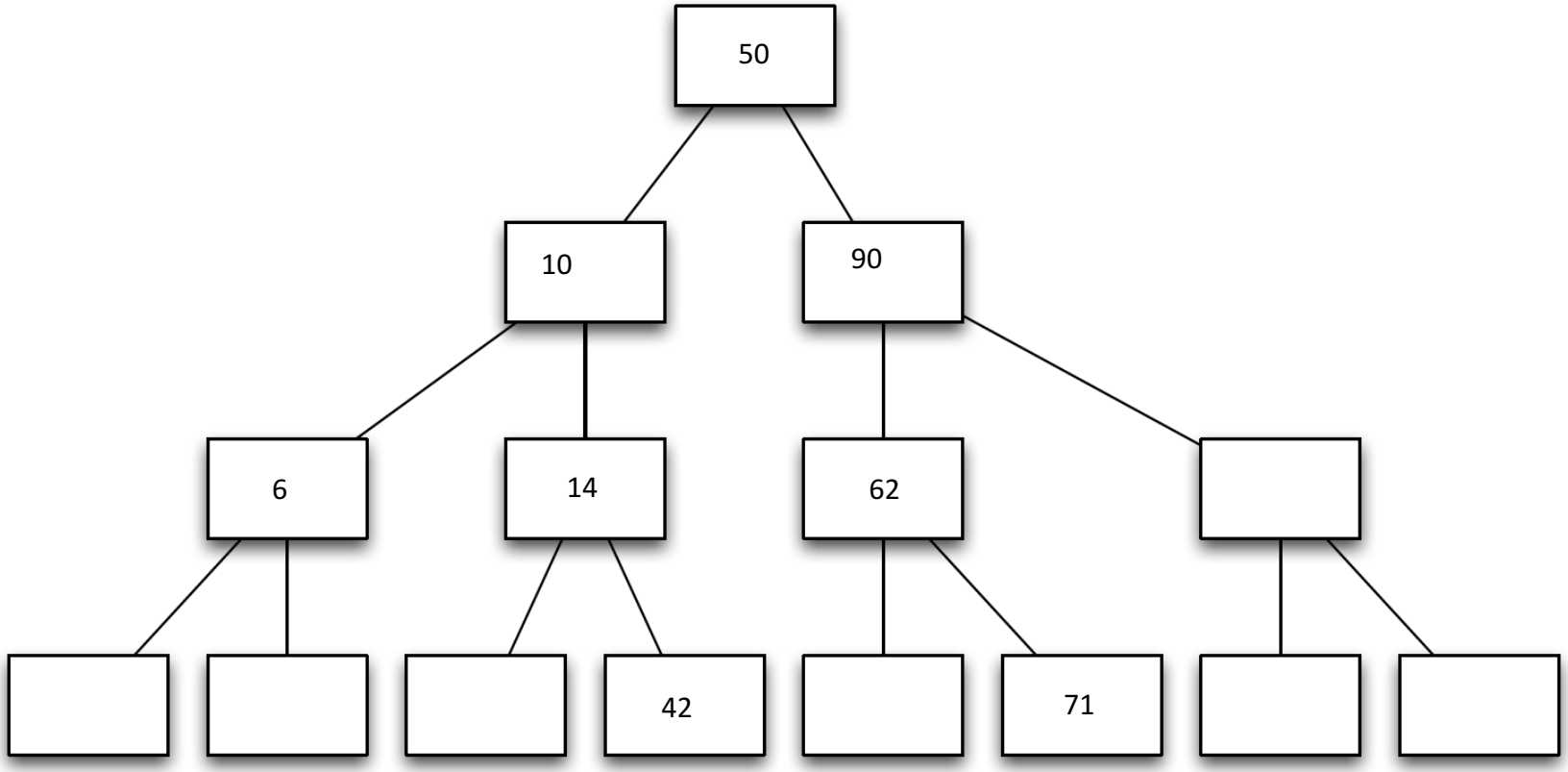
Name: Joaquin Saldana Question#: 1



Question 2

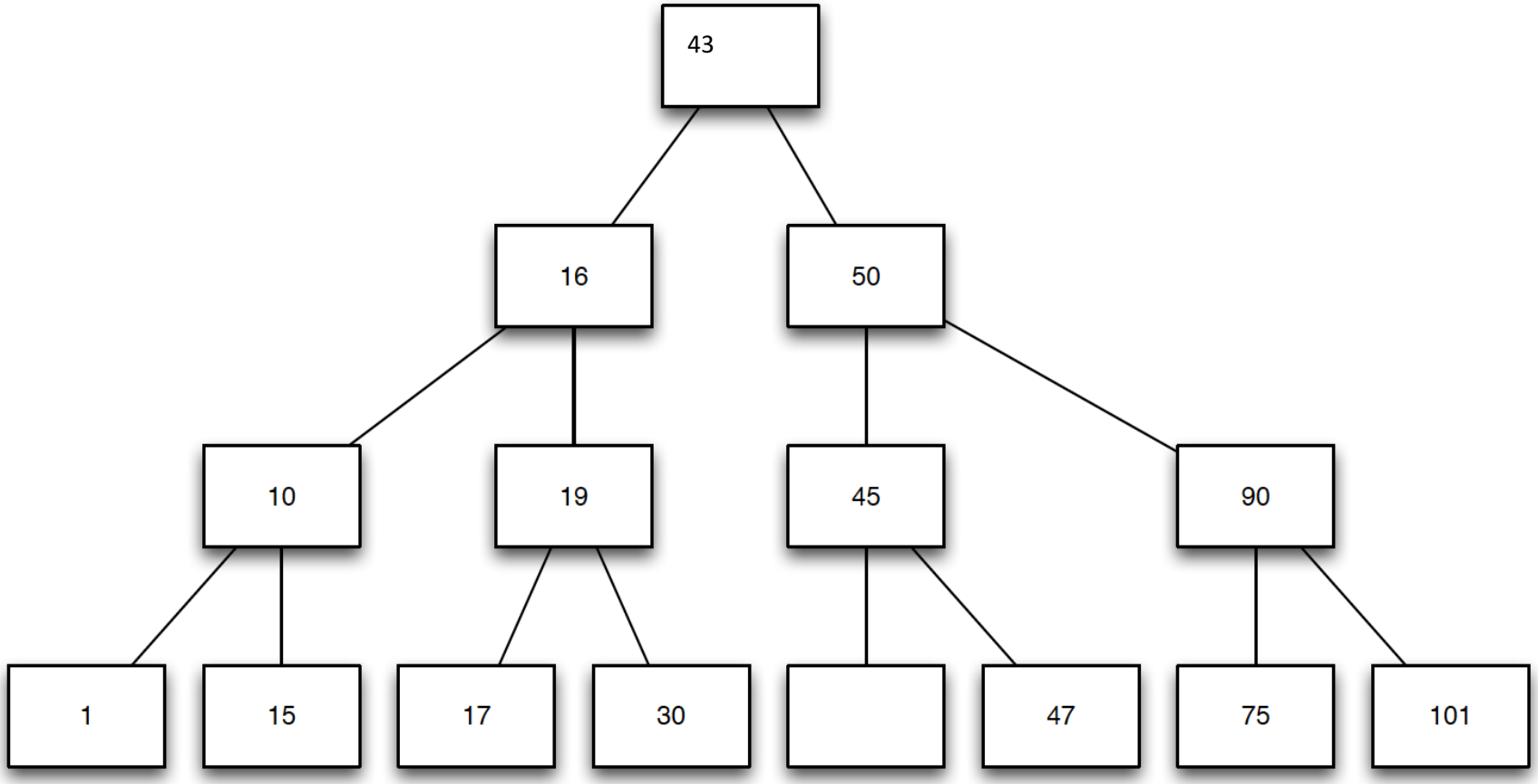
The order for inserting the numbers 1 through 7 such that the resulting tree is a FULL binary tree is …
4, 2, 6, 1, 3, 5, 7

This order will put each leaf at the same depth, every internal node has 2 children, the tree will have ((2^h+1) - 1) nodes, and have 2^h leaves

Question 3 Part A

if we removed the value 42 (the root of the tree) the value which will replace the root node is 43 the leaf node of 45 at depth 3.

The node holding value 43 is the left most child of the right node of 42.



Question 3 Part B

The node holding the value 30 will replace the node holding the value 19