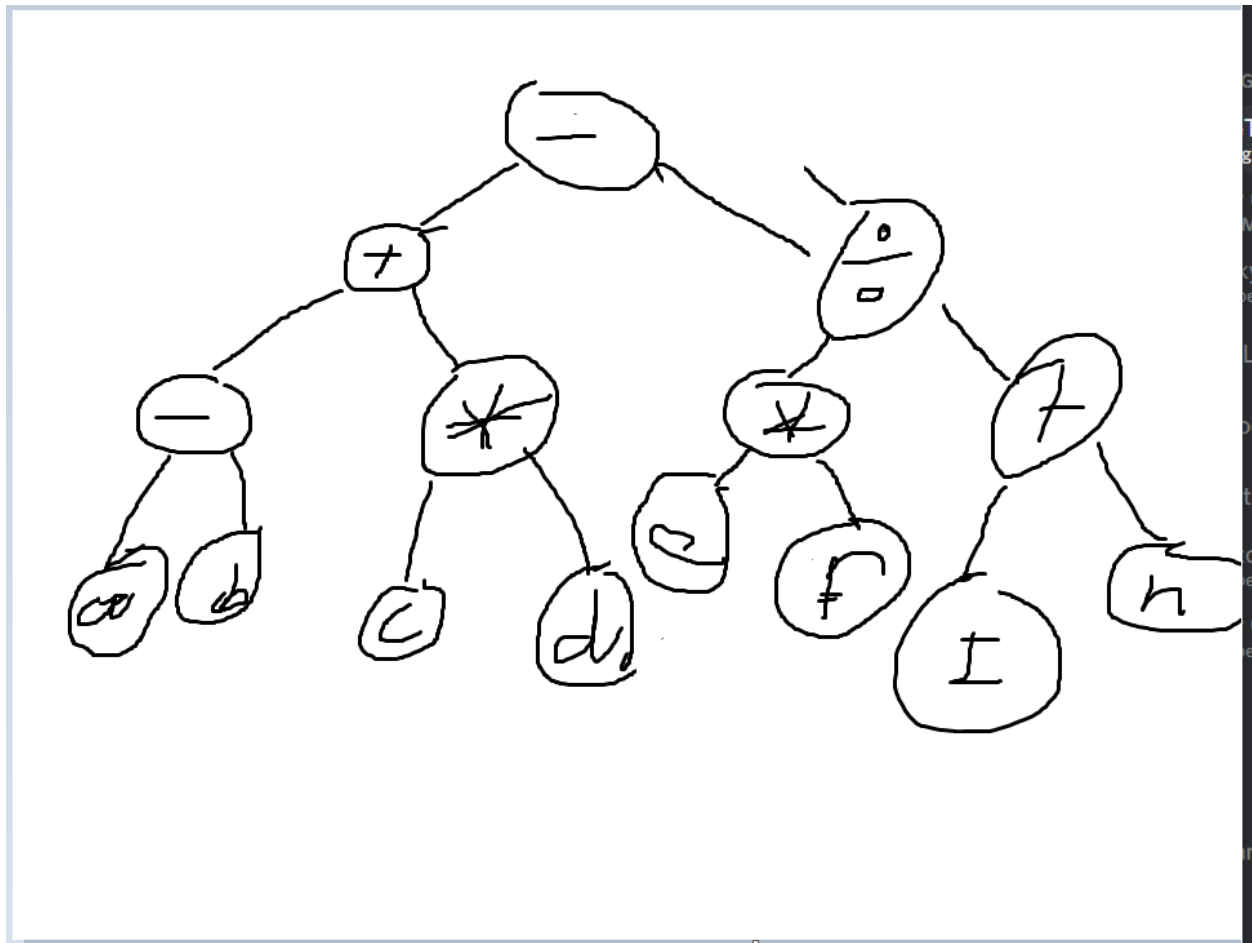
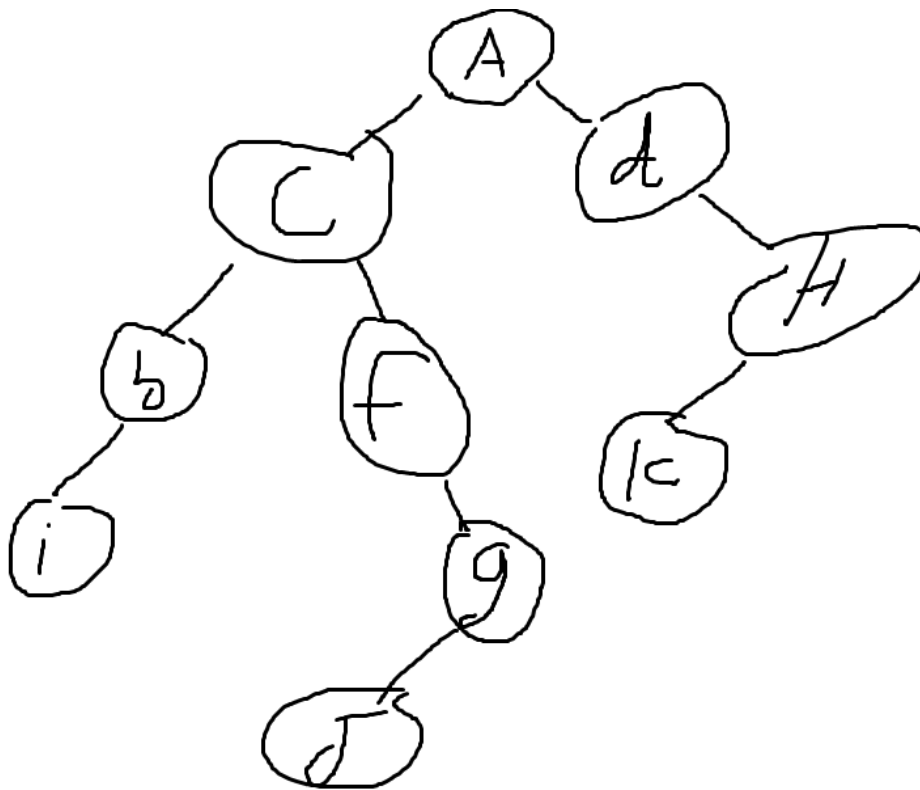


1.



2.



3. A. This tree has a height of 4

B. The tree has a depth of 0

C. The root node is at level 0

D. The depth of node 0020 is 3

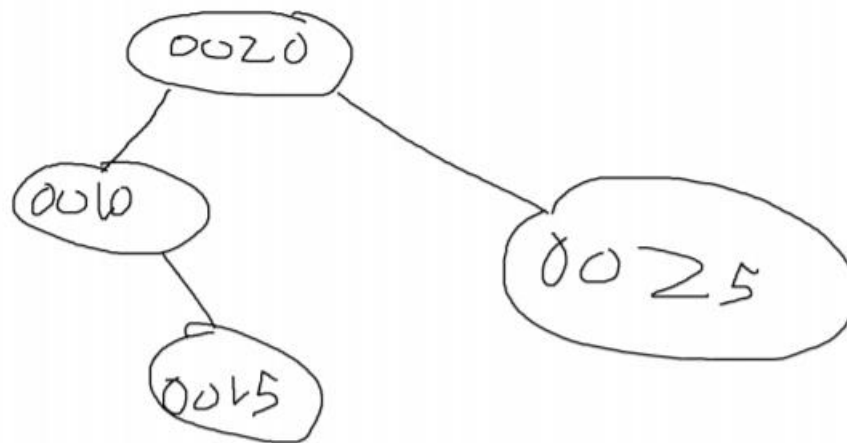
E. The leaf nodes are 0001, 0020, 0052, 0083, 0099, 0125, 0152

F. The height of node 0020 is 0

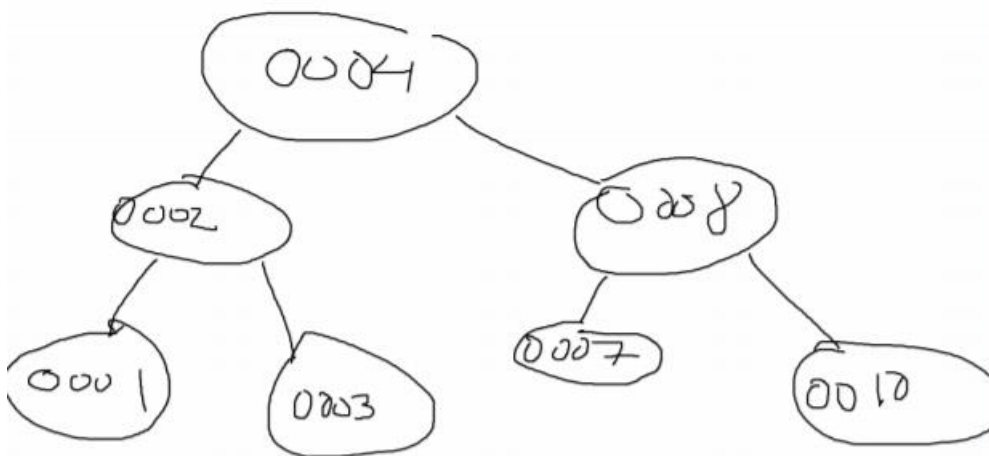
G. Pre: 0100, 0050, 0003, 0001, 0020, 0080, 0052, 0090, 0083, 0099, 0150, 0125, 0152 In: 0001, 0003, 0020, 0050, 0052, 0080, 0083, 0090, 0099, 0100, 0125, 0150, 0152 Post: 0001, 0020, 0003, 0052, 0083, 0099, 0090, 0080, 0050, 0125, 0152, 0150, 0100

4. A. An AVL tree is a self-balancing binary search tree, that will balance itself through rotating nodes through recursion.

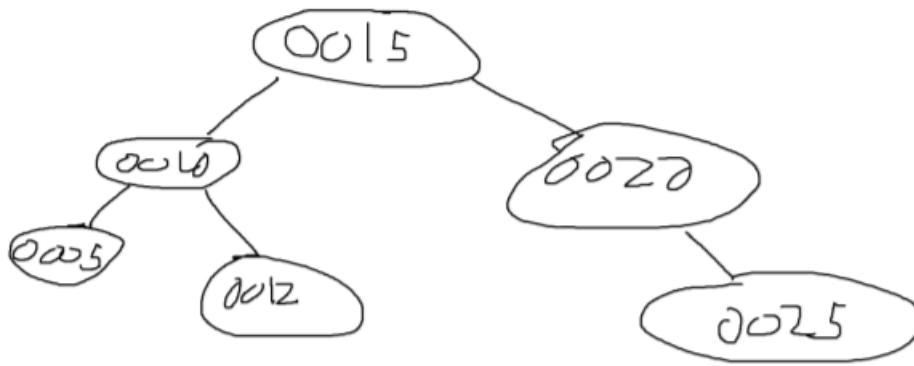
B. The purpose of the tree is to check the right and left sub trees and makes sure there isn't a height difference of more than once before it will self-balance.



5.



6.



7.