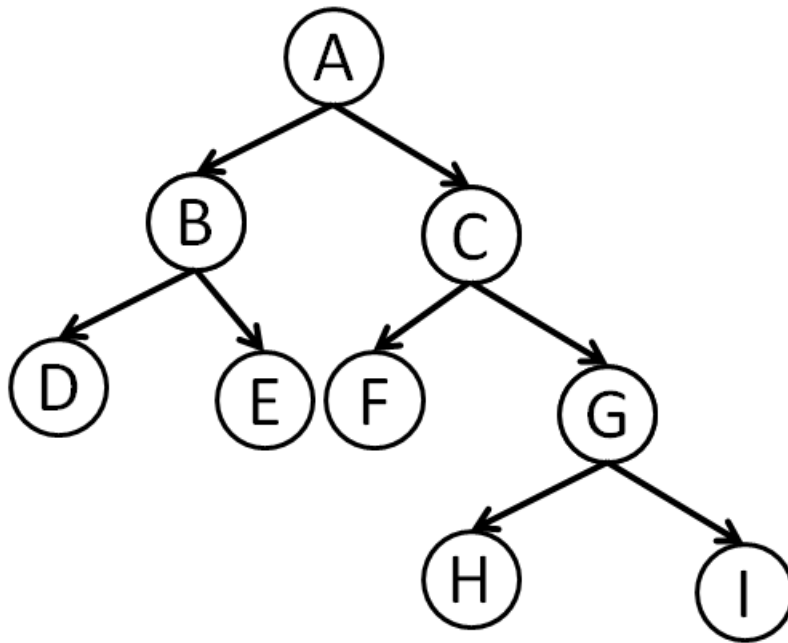1. Given the binary tree below:

Answer the following questions:

a) What is the height of the tree?

b) How many leaf nodes are there on the tree?

c) Is this a full binary tree? Is this a complete binary tree? Is it a perfect binary tree?

d) Write down the pre-order, in-order and post-order traversal result

2. a) Draw the binary search trees (step-by-step) when you insert the following keys in that order into an initially empty tree, assuming every node is inserted as leaf.

R E P U B L I C A N

b) If we perform a search operation on the tree, with target value 'M', which values will be compared

c) Delete B node from the tree, draw the result.