Final exam on Prolog

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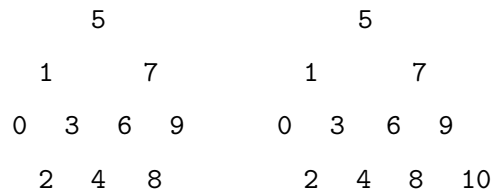
A *binary search tree* (BST) is a binary tree whose nodes contain items who can be totally ordered and dispersed such that all node, the values of the left subtree are smaller than the value of the node, which is, in turn, smaller than the values of the right subtree. See figure 1a for an example. A node is added to BST as a leaf. For instance, adding 10 leads to the BST shown in figure 1b. Write a function `add/2`, such that the call `add(`N`,`T`)`



(a) A BST (b) Addition of 10.

evaluates into a BST containing the nodes of BST T plus N, by adding N as a leaf.