## Answers

1. 

In a binary tree, every node has at most two children. There is no ordering of values imposed on a binary tree.

A binary search tree is a binary tree with ordering imposed on the values of the nodes. All the values in the nodes on the left side of the tree are smaller than the root, and all the values in the nodes on the right side are larger than the root.
2.
def same_shape( $\mathrm{t} 1, \mathrm{t} 2$ ):
if $\mathrm{t} 1==$ None and $\mathrm{t} 2==$ None: return True
if $(\mathrm{t} 1==$ None and $\mathrm{t} 2!=$ None $)$ or $(\mathrm{t} 1!=$ None and $\mathrm{t} 2==$ None $)$ : return False
return same_shape(t1._left, t2._left) and same_shape(t1._right, t2._right)

## 3.

def concat(alist, blist):
\#ensure that alist is not empty
if alist._head == None: return blist
\#avoid traversing alist if blist is empty
if blist._head == None: return alist
curr = alist._head
while curr._next != None:
curr = curr._next
curr._next = blist._head
return alist

