Quiz #8: More Trees

1. State the BST property.

2. Is this tree a binary search tree? Why or why not?

```
    19
   /   \
  7     42
 /   /  /  \
3   14 35  49
 /  /  /  /  \
9  21 28 39 45 56
```

3. When reasoning about recursive functions, we have seen that we can assume that every recursive call in the body of the function is correct. However, this isn’t always a valid assumption. Define (in Python) a BST method that results in infinite recursion.

4. What is the difference between a leaf an an internal value of a tree?

5. David says, “the best case for a BST insertion is when the tree is empty.” What is wrong with this sentence?