L16: Binary Search Trees

[5,3,8,2,6,9,1,4,7]

1. Build and draw a BST below by inserting the above elements in order.

2. Delete 2 from the tree, and redraw it.

3. Take your tree from step 2, delete 6, and redraw it

4. Take your tree from step 3, and delete 5. Draw the two possible states of the tree after this deletion.

5. Take your tree from step 4, add 6, and redraw it.

6. Implement pseudocode below to remove an element `e` from a tree starting at node `root`. `TreeNode` objects contain `left`, `right`, and `item` pointers.

```
public void remove(TreeNode root, E e){



}
```