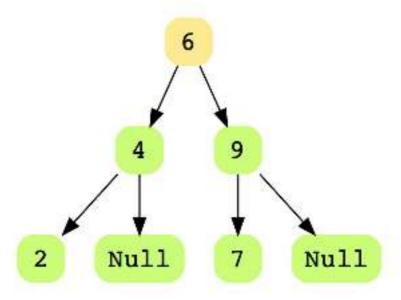
## Quiz

It's quiz time! Test yourself by solving these questions about binary search trees.

The worst-case time complexity of insert, search and delete operations in a binary search tree is as follows:

BST property:

The value of the left child of any node in a binary search tree will be less than whatever value we have in that node, and the value of the right child of a node will be equal to the value in that node. Is the following tree a valid binary search tree?



What is the average time complexity of the following code?

```
def search(self, find_val):
    return self.search_helper(self.root, find_val)

def search_helper(self, current, find_val):
    if current:
    if current.data == find_val:
        return True
    elif current.data < find_val:
        return self.search_helper(current.right, find_val)
    else:
        return self.search_helper(current.left, find_val)</pre>
```

5	Which of the following is a valid implementation of the Node class for a binary search tree?

**Check Answers**