

**CMPE 242**  
**Spring 2021**  
**Hands-On Activity 7**

**Assume that we have the following API for the Binary Tree, for the questions below.**

```
public class BinaryTree {  
  
    private Node root;  
  
    private class Node {  
        private int key;           % key  
        private Node left;        % left child  
        private Node right;       % right child  
    }  
  
}
```

1. Write a **recursive** Java solution to find the minimum key in the Binary Tree. The method should be implemented as a method of the `BinaryTree` class.
2. Write a **recursive** Java solution to find the total number of the keys in the Binary Tree. The method should be implemented as a method of the `BinaryTree` class.

3. Write a **recursive** Java solution to find the height of the Binary Tree. The method should be implemented as a method of the `BinaryTree` class.
4. Write a **recursive** Java solution to find the sum of all the keys in the Binary Tree. The method should be implemented as a method of the `BinaryTree` class.