Trees

Exercises

1- Implement a method to calculate the size of a binary tree.

Solution: Tree.size()

2- Implement a method to count the number of leaves in a binary tree.

Solution: Tree.countLeaves()

3- Implement a method to return the maximum value in a binary search tree using recursion.

Solution: Tree.max()

4- Implement a method to check for the existence of a value in a binary tree using recursion. Compare this method with the find() method. The find() method does the same job using iteration.

Solution: Tree.contains()

5- Implement a method to check to see if two values are siblings in a binary tree.

Solution: Tree.areSibling()

6- Implement a method to return the ancestors of a value in a List<Integer>.

Solution: Tree.getAncestors()