AADS Lab 1: Binary Trees1

There are two files associated with the lab: BinarySearchTree.java and BinaryTreeTester1.java. Import these into an Eclipse Project.

Task 1:

Implement a `findMaximum()` method **using a while loop** which will return the largest value in the tree. Test it, of course.

Task 2:

Implement a `findMimimum()` method **using recursion** which will return the smallest value in the tree. Here's what you need to get started:

```
public T findMinimum()
{
   return recFindMinimum(root);
}

private T recFindMinimum (Node subTreeRoot)
```

Task 3:

Implement a Person class that is compatible with the Tree and the commented tester code.
The instance fields are: firstName(String), surName(String), age(int).
Note: The tree should be sorted based on SurName (an inOrder traversal should verify this.)

Task 4:

Implement a recursive `find()` method. Which will return the value of the node if found, and null if not.

```
public T find(T searchVal)
{
   //start at the root and recurse
   return recFind(root, searchVal);
}

private T recFind(Node subTreeRoot, T searchVal)
```