

Lab # 8 Binary Search Tree (Recursive) (10 marks)

class BSTRecursive defines a binary search tree (using recursion). It has **root** and **size** as its fields. You are to write the following methods for class BSTRecursive: (The description of each method is given at its source code comment.)

```
public int numNodesLessThan(BSTNode n,int v) public int  
numLeavesLessThan(BSTNode n,int v) public String insertInOrder(BSTNode  
n)
```

```
public int nextOf(BSTNode n,int v)
```

JUnit is given for each method. **All methods must be written using recursion! If you do not use recursion in any**

method, you will not get any mark for that method, even though the test cases are correct.

How to submit:

Submit the jar file of your project (the jar file must include all your java files and test cases) to Courseville (zipped all files together and name it **YourID_Lab08_BSTRecursive** where YourID is your student ID).