2190261 Fundamental Data Structures & Algorithm Lab # 9

**Lab # 9 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\_Lab09\_BSTRecursive** where YourID is your student ID).