CSC 226: Lab 2
Summer 2019

1. Draw the binary search tree if the following sequence of integers is inserted into in an empty binary search tree.

    50, 27, 16, 88, 34, 65, 52, 77, 93, 4, 12, 29, 44, 92

2. Download BST.zip from Connex->CSC 226->Labs->Lab 2
3. Extract BST.zip in your Desktop
4. Open up a terminal window
5. In the terminal, issue the following command: cd ~/Desktop/BST
6. Open up BST.java in a text editor (you can also use Eclipse if you want, but in Eclipse you'll need additional steps. Create a new Java Project and name it BST. Instead of using the default location choose the folder BST from your Desktop. That's it.)
7. Implement all the missing functions:
    a. private int nLeaf(Node x) -- This function counts the number of leaf nodes in a binary search Tree.
    b. private void preOrder(Node x) -- This function should print the keys of a binary search tree in pre-order.
    c. private void inOrder(Node x) -- This function should print the keys of a binary search tree in in-order.
    d. private void postOrder(Node x) -- This function should print the keys of a binary search tree in post-order.
    e. Optional: implement an iterative version of the "put" function.
8. Solve the problems in the main function. Each comment that you see in the main function is just a one-line description for the problems that you are asked to solve.
9. Issue the following command to compile: javac -d bin

    ./src/edu/princeton/cs/algs4/*.java
10. Issue the following command to run the compiled java program: java -cp bin edu.princeton.cs.algs4.BST