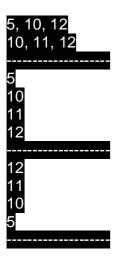
CE 242 - Data Structures and Algorithms Spring 2009 - Ahmet Ardal Lab Assignment 4

- 1. Using the reference binary search tree implementation, write code for the implementation of BTreeRotateRight() and BTreeRotateLeft() functions. The code for those functions' declarations and definitions are provided in the BTree. h and BTree. cpp source files and what you are asked to do is just filling in the function definitions. Further explanation is given as inline code comment in the BTree. h and BTree. cpp source files. For detailed information about tree rotations check this: http://en.wikipedia.org/wiki/Tree rotation
- 2. Using the reference binary search tree implementation, write code for the implementation of BTreeInsertRoot() function. The code for this function's declaration and definition is provided in the BTree. h and BTree. cpp source files and what you are asked to do is just filling in the function definition. Further explanation is given as inline code comment in the BTree. h and BTree. cpp source files.
- 3. Using the reference binary search tree implementation, write an alternative version of the BTreeRemove() function that is current implementation replaces the removed node with its in-order successor (the left-most child of the right subtree), your implementation should replace the removed node with its in-order predecessor (the right-most child of the left subtree). Again, the code for this function's declaration and definition is provided in the BTree. h and BTree. cpp source files and what you are asked to do is just filling in the function definition. Further explanation is given as inline code comment in the BTree. h and BTree. cpp source files.

Note:

- Test code for this homework is included in the file testBTree.cpp.
- Output of the test code for BTreeInsertRoot() function:



- Output of the test code for other BTree module functions:



