

Implementation of data structures and algorithms

Short Project 7: Red Black Tree

Due: 11:59 PM, Sun, Oct 27.

Submission procedure: same as usual.

Team task:

1. Extend BST to Red Black Tree. For add and remove operations you need to implement the algorithms discussed in the class. If you implement any other algorithms, you will not get any credit. Starter code (RedBlackTree.java) is provided.

To earn excellence credit, implement the add method as single pass.

Practice task (optional):

2. In this task, you will compare the performance of operations add, remove, contains in a Skip List with the corresponding operations in a Red Black Tree. Modify the driver code for Skip List to Red Black Tree to measure the performances of these operations in RBT. **You will earn excellence credit for this study.**