

No collaboration
Read Chapters 12 and 13

1. [Moved to Problem Set 3]

2. Consider the double rotation step in an rb-tree deletion. Based on the potential defined in the class notes (1 for a 2-node, 2 for a 4-node), this case increases the potential by 3 units. Modify this case so that it only increases the potential by 2 units. Hint: break this case into subcases. Assign the ranks differently depending upon the subcase. You do not need to change the restructuring (double rotation).