EL9343 Homework 4
(Due November 17, 2016)

All problem/exercise numbers are for the third edition of CLRS text book

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1. Exercise 12.2-1 in CLRS Text book

2. Exercise 12.2-5 in CLRS Text book

3. Exercise 12.3-3 in CLRS Text book

4. For the AVL Tree A in Figure 1, construct one insertion to trigger each of the four imbalance cases defined on slide 20, for each case,

   (a) what is the key value inserted?

   (b) how many rotations needed to restore the AVL tree property?

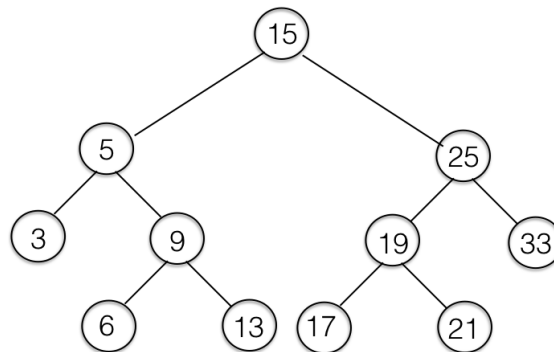   (c) what is the restored AVL tree with the inserted key?

Figure 1: AVL Tree for Question 4

5. Exercise 22.1-6 in CLRS Textbook

6. Exercise 22.2-5 in CLRS Textbook

7. Exercise 22.3-2 in CLRS Textbook

8. Exercise 22.3-10 in CLRS Textbook

9. Problem 22-1 in CLRS Textbook