COMP 2100 Homework #5
Fall, 2022
Prof. Stucki

Please refer to the syllabus for formatting standards for your homework.

Complete the following exercises:

Section 3.2, (p. 416-423)

- ➢ 3.2.9
- ➢ 3.2.15
- ➢ 3.2.18

AVL-Trees

- ➢ Show the AVL-Tree that is produced after every insertion of the words in the sentence below. Insert them in the order they appear in the sentence. Include the balance factor at each node in your diagrams.

  "Program testing can be a very effective way to show the presence of bugs, but is hopelessly inadequate for showing their absence." (Edsger Dijkstra)

- ➢ Show the BST that would be produced by the same sentence, in the same insertion order. You only have to show the final tree, since the tree is not self-balancing.

Section 3.3, (p. 449-456)

- ➢ 3.3.2
- ➢ 3.3.3
- ➢ 3.3.5
- ➢ 3.3.9
- ➢ 3.3.11

DUE: Friday, October 7