

Exercise Sheet 10

Handout: November 11th — Deadline: November 25th before 4pm

Question 10.1 (0.5 Marks)

Insert the keys 8, 2, 1, 3, 6, 10, 9 in this order into an empty AVL tree. Draw the tree constructed after each insertion and after each (double-)rotation (cf. the example in the lecture notes). Write down the balance degree for each node next to the node as shown in the lecture notes.

Question 10.2 (0.5 marks)

Say the minimum number of nodes that an AVL tree of height $h = 10$ must contain.

Question 10.3 (4 marks) Implement the problem "AVL II" on the OJ system.