

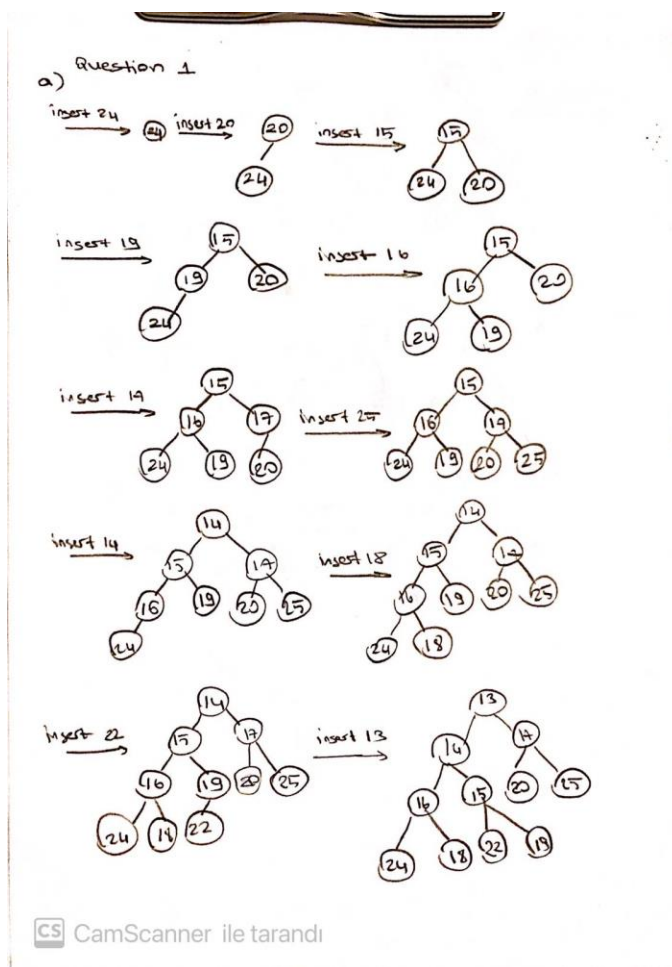
Homework 3 – Heaps, Priority Queues and AVL Trees

Funda Tan – 21801861 – Section 3

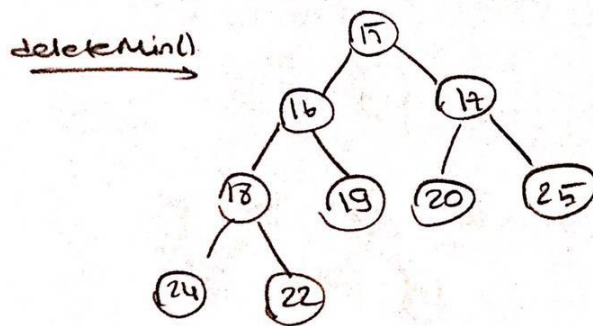
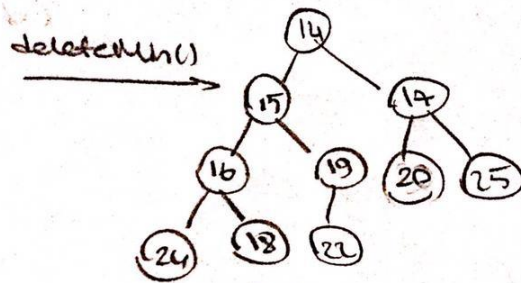
Question 1

A)

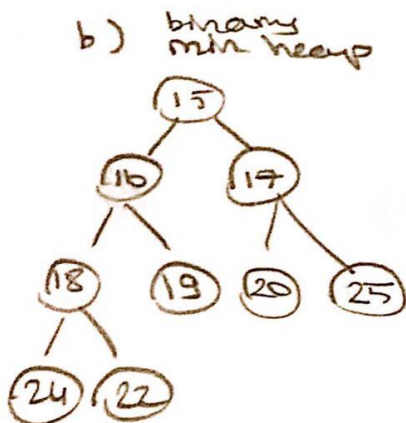
Insertion



Deletion



B)



Keys as encountered in preorder traversal:

15, 16, 18, 19, 24, 22, 17, 20, 25

Output is not sorted.

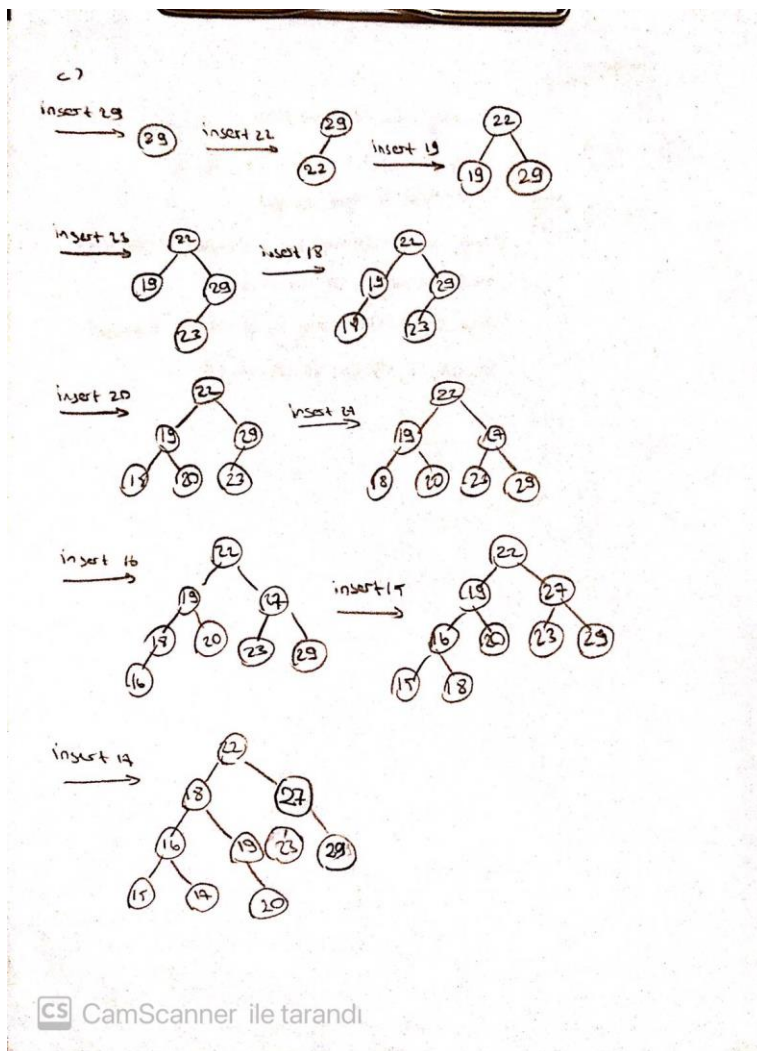
Keys as encountered in inorder traversal:

24, 18, 22, 16, 19, 15, 20, 17, 25

Keys as encountered in postorder traversal:

24, 22, 18, 19, 16, 20, 25, 17, 15

c)



Question 3

Instead of increasing printer number by 1, we can multiply the printer number by 2 in each iteration. By that way, we will calculate the optimum number of printers more effectively in very large libraraires with a large number of printers and large number of requests.