

COMP 171 Data structures and Algorithm

Quiz 2

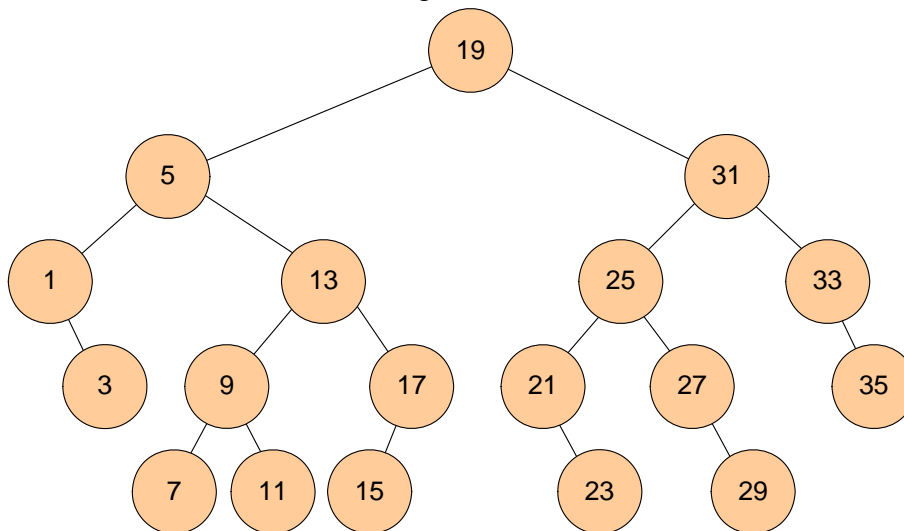
Name: _____

Student ID: _____

Lecture Section: _____

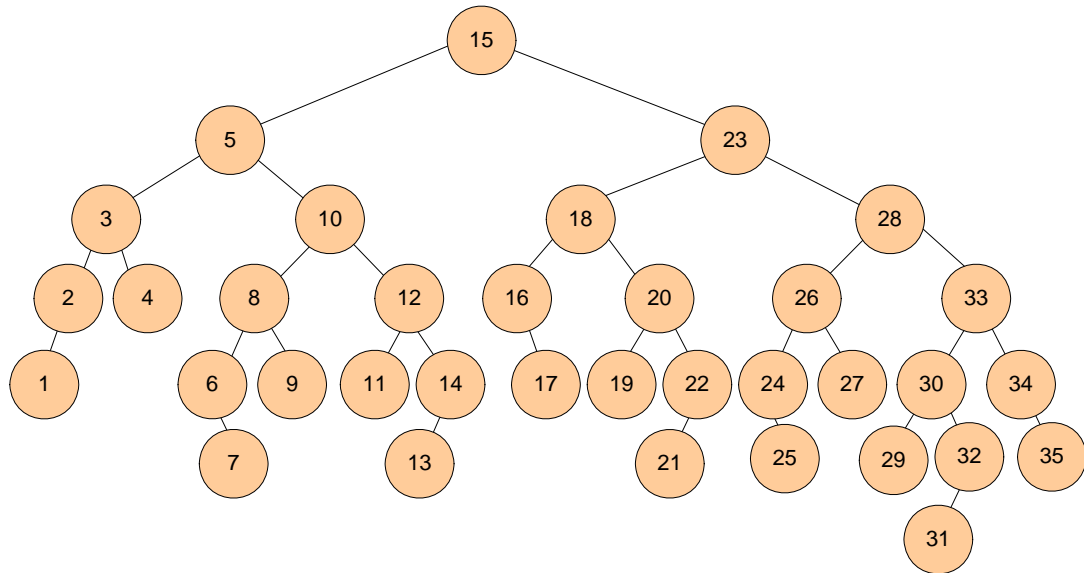
Question 1:

Insert 8, 20 and 24 in the following AVL tree. Draw the AVL tree after each insertion



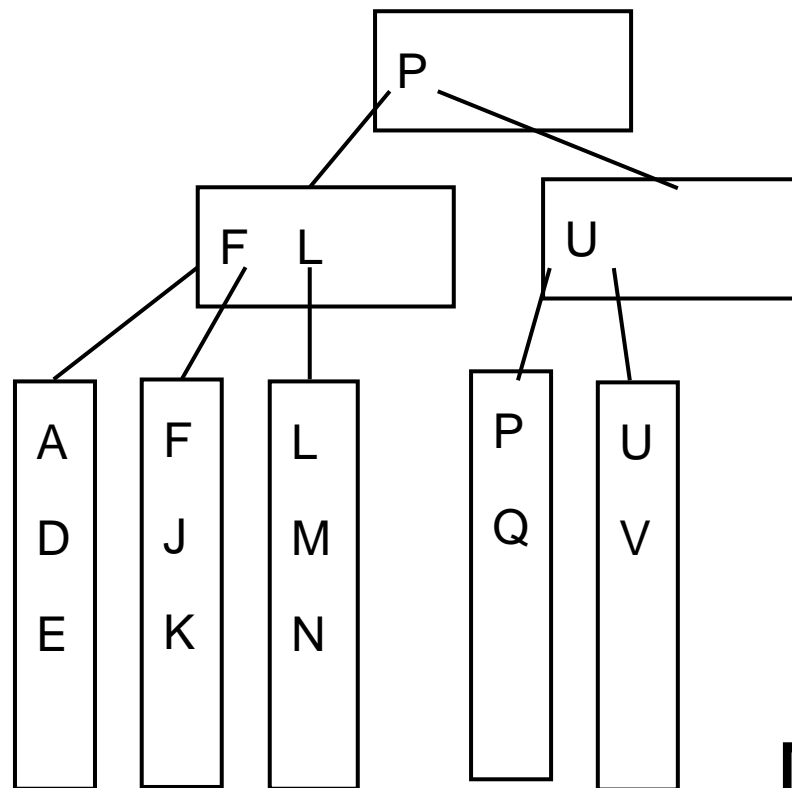
Question 2

Delete 2, 13 in the following AVL tree. Draw the AVL tree after each deletion.



Question 3

Delete P from the follow B+ tree and add O to it after then. Draw the tree after each operation.

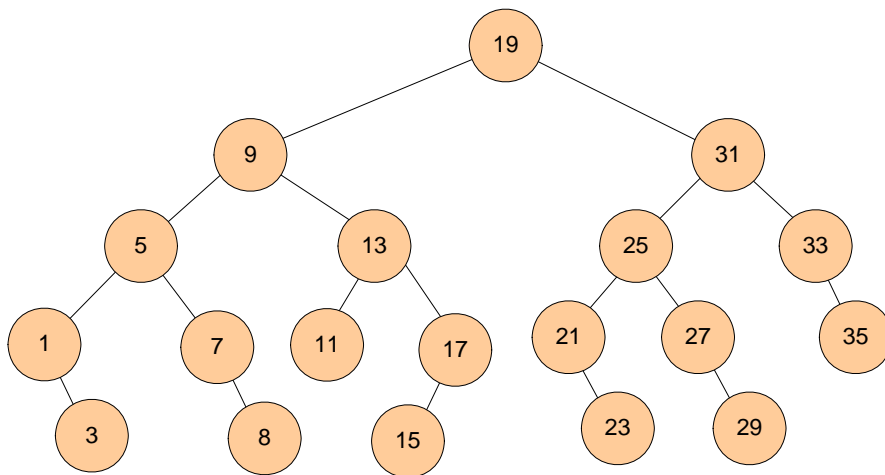


M = L = 4

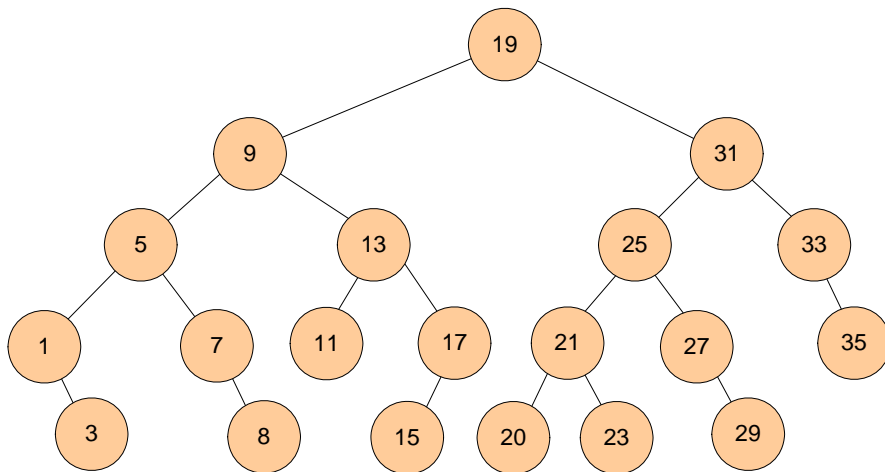
Solution:

Question 1:

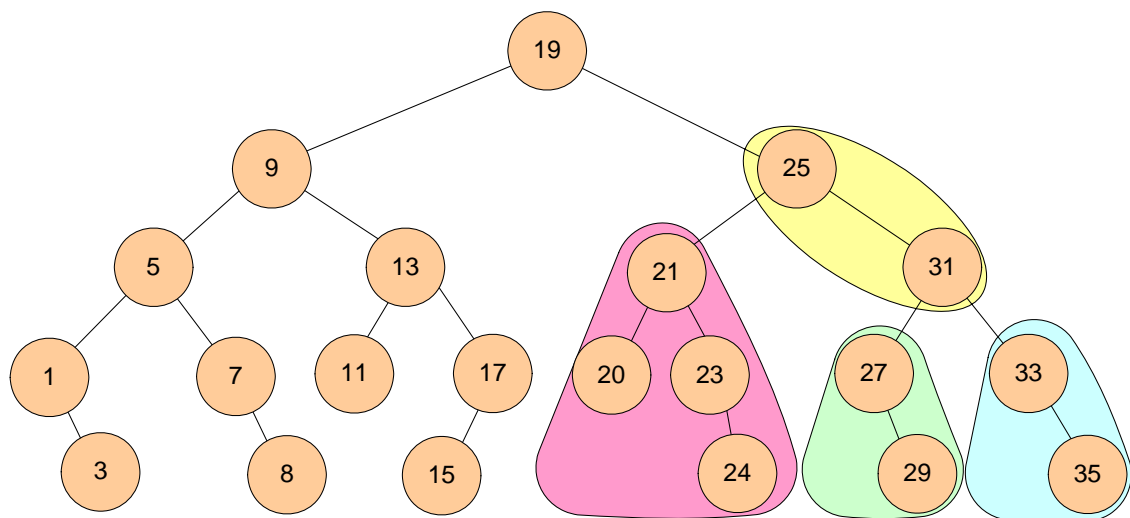
After 8 is inserted



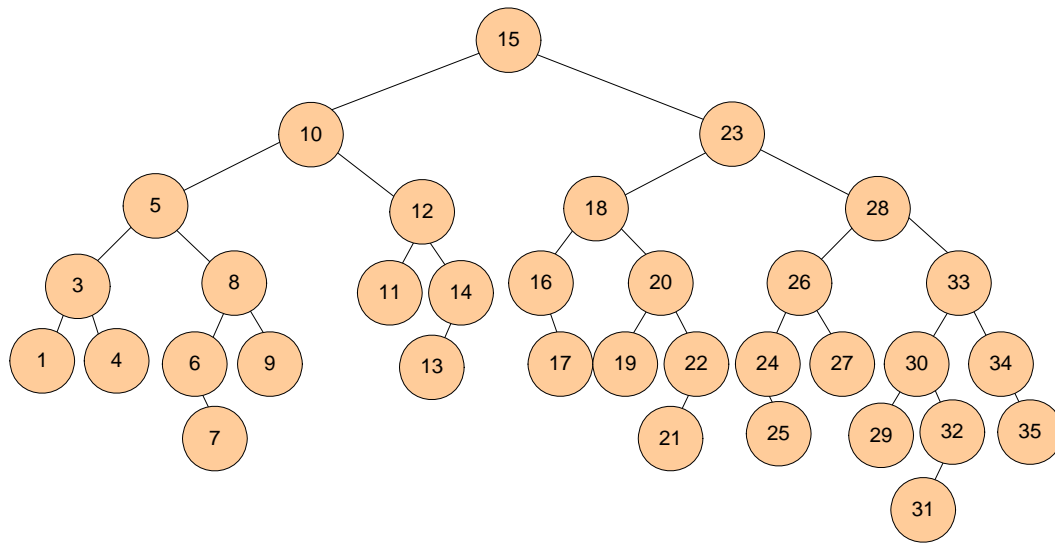
After 20 is inserted



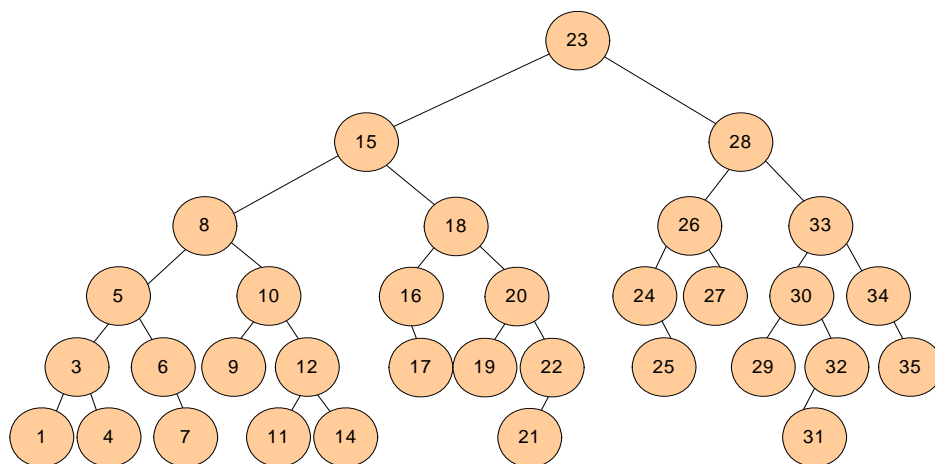
After 24 is inserted



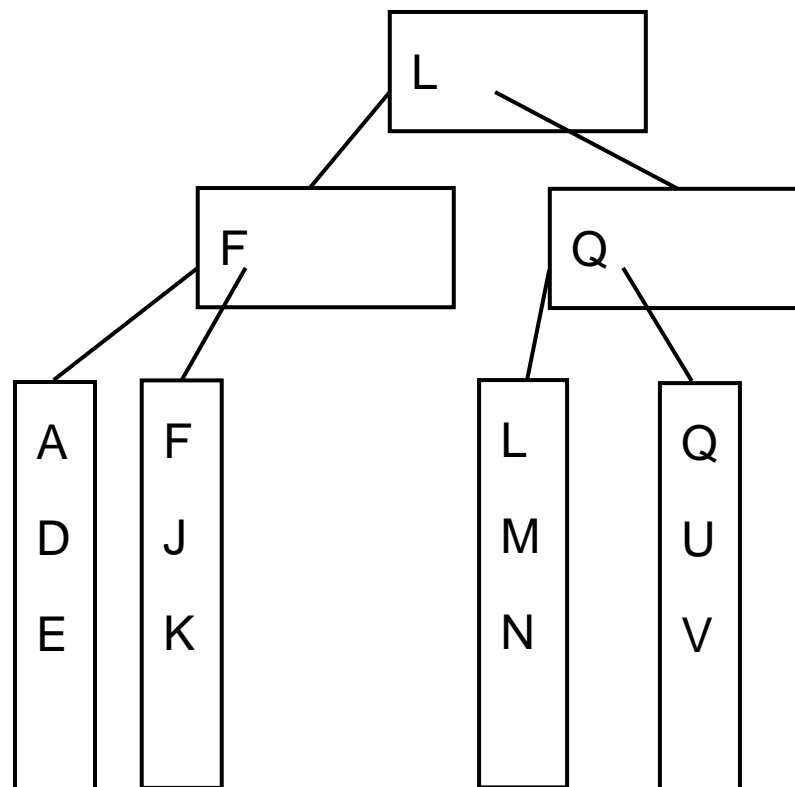
Question 2:
After 2 is deleted



After 13 is deleted



Question 3:
After P is deleted



After O is inserted

