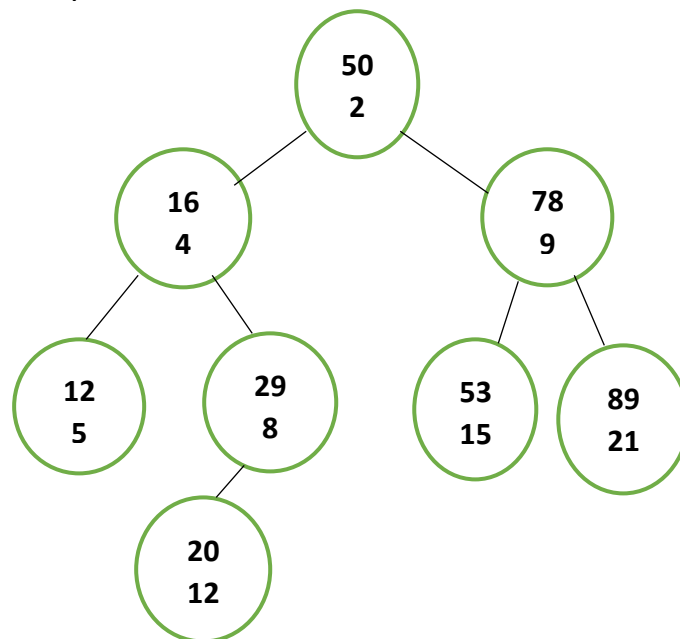# CS 201 – Data Structures II (L1)
Quiz # 03

1. **[08 points]** Build an AVL tree with the following sequence of nodes. Show each step of insertion and rotation:

   3, 1, 2, 6, 8, 15, 9, 0

2. **[08 points]** Delete 50 from the given treap. Show each step of deletion and mention the type of rotation performed.

3. **[04 points]** Give brief, to-the-point answers to the following questions.
   a. What is the expected runtime of deletion in treap? Justify your answer.
   b. The find(x) operation would traverse more nodes in an AVL tree than in a treap. (True/False)? Justify your answer.