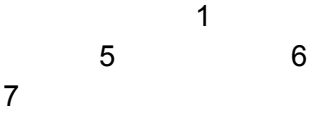
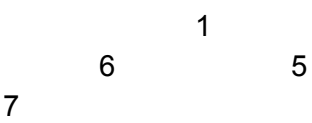
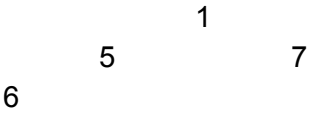
Burak Erdem Varol
21202534 - Section 3

1a-)



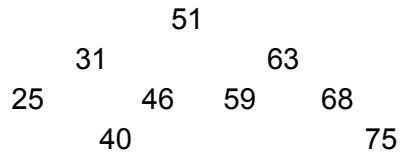




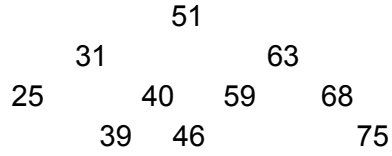
1b-)

T(1) = 1
T(2) = 1
T(3) = 2
T(5) = 4C3 * T(3) * T(1) = 8

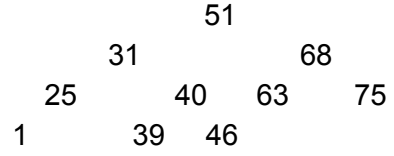
1c-)



Adding 39, it will cause single right rotation.



Inserted 1 and deleted 59, it will cause single left rotation.



1d-)

First order : 1 3 5 7
Second order: 7 5 3 1

This example trees show that Insertion order of the same set of elements into an AVL tree affects the resulting structure.

2-)Do your findings related to average number of rotations in the AVL tree agree with theoritical results?

- If size is lower ,deviations in random array was higher. The other part of the array variations was expected for me.

Do different patterns of insertion affect the number of rotations in the AVL tree? If so, explain how. If not, explain why not?

- I tested in first question in here. If size is lower, deviations in random array was higher. The other part of the array variations was expected for me.