Laboratory practice No. 4: Linked List and Array List

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2) the code was based on the following repository:

Gómez, M. Barona, C. (2018). Lab04 (version 1.0) [Source code], https://github.com/cbaronac/ST0245-032/tree/master/laboratorios/lab04/codigo

3) Practice for final project defense presentation

1. In a binary tree the average search and insertion is logarithmic, in the worst case we can consider if we have is tree as a list in this case the complexity would increase to O (n), but in general if the tree is balanced this does not It should happen.

2. To the exercise 2.1 the data is entered in a way that the inequalities of major and minor are respected, after that they are printed in a post-order form which means that it will appear in the following form: left, right, root a, whereas if it were printed in pre-order it would be : root-left- right
3. The complexity is O(n) where n are all the input elements.

$$n = \sum_{i=0}^{n} x_i$$

4. n defined as:
the total of nodes in the tree.

4) Practice for midterms

1. raiz.getLeft()
raiz.getRight()

2. c

3.
a) false
b) a.data
c) a.right, suma-a.data
d) a.left, suma-a.data

4. 1. a
4.2.a
4.3.d
4.4.b

5.
a)toInsert == p.data;
b) toInsert > p.data;

6. 1. d
6.2. return 0;
6.3. %2==0;

7.1. a
7.2. b (2)

8. b

9. a

10. a

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