

Laboratory practice No. 4: Trees

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3) Practice for final project defense presentation

3.1 Exercise 1.1

In order to develop this exercise we did not use Trees to solved it, instead we used ArrayList, as we thought it was easier to use.

The worst case scenario for the search is $O(n^2)$, as it has nested loops that go through all the ArrayList.

3.3 Exercise 2.1

The class starts with the method `main()`, in which it will be asked to the user to introduce the pre order of the tree, number by number. As the user enters the numbers, a tree is building up with them. When the user is done typing the numbers the tree created with them will be passed as a parameter to another method called `punto2(Tree arbol)`. Then the root of the tree will be extracted and passed as a parameter to another method called `punto2Aux(Nodo root)` where the pos order will be printed.

3.4 Complexity of 2.1

The complexity is $O(n^2)$;

4) Practice for midterms

4.1 `1+altura(raiz.izq),1+altura(raiz.der)`

4.2 `c`

4.3 `false/0/a.izq,suma-a.dato/a.der,suma-a.dato`

4.4 `c,a,d,c`

4.5 `a,`

4.6 `d,return 0,>0`

4.7 `a,b,c`

4.8 `b`

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ESTRUCTURA DE DATOS 1
Código ST0245

4.9 a

4.10 b

4.11 c,b,b

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