Laboratory practice No. 4: Hash Tables and Binary Trees

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3) Practice for final project defense presentation

3.1 The data structure used to calculate the distance between one bee, and another has been Tuples and Arrays, they were chosen due to their ease of work and the dominance that they already had over them. The complexity of the algorithm is O (n ^2).

3.3 In the PrincipalArbol class, the user is asked to enter the desired number of nodes to insert into the tree, after this, for is created that inserts the values according to the number of times previously indicated by the user. Finally, the data is printed according to the postorden method, which consists of initially traversing the left node, then the right node, and finally the root node.

3.4 O(nLog(n))

3.5 n = number of nodes to operate.

4) Practice for midterms

4.1
- ***4.1.1*** *B*
- ***4.1.2*** *A*

4.2
- ***4.2.1*** Root
- ***4.2.2*** O(n)

4.3
- ***4.3.1*** return True
- ***4.3.2*** O(n)

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4.4

4.4.1 C
4.4.2 A
4.4.3 D
4.4.4 C

4.5

4.5.1 p.data = toInsert
4.5.2 p!=null

6) Team work and gradual progress (optional)

Member	Date	Done	Do	To do
Alejandro Torres	22/04/21	I read the lab guide.		Underestand the problem about robotic bees.
Mateo Muñoz	22/04/21	I read the lab guide.		Underestand the problem about robotic bees.
Alejandro Torres	22/04/21	I understood the problem about robotic bees	Specify with Mateo	Implement the problem about robotic bees.
Mateo Muñoz	22/04/21	I understood the problem about robotic bees.	Specify with Alejandro.	Implement binary trees.
Alejandro Torres	27/04/21	I implemented the algorithm robotics bees.	Analyze the implementation of Mateo	Explain the data structure about the robotic bees.

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Mateo Muñoz	27/04/21	I implement the algorithm binary trees.	Analyze the implementation of Alejandro	Calculate the complexity of point 2.1
Alejandro Torres	27/04/21	I explained the data structure about the robotic bees		Explain thevariables of numeral 3.4
Mateo Muñoz	27/04/21	I calculated the complexity of point 2.1		Solve exam excercises.
Alejandro Torres	27/04/21	I explained the variables.		
Mateo Muñoz	29/04/21	I solved the exam excercises.		Design a template for gradual progress.
Alejandro Torres	29/04/21			
Mateo Muñoz	30/04/21	We design a template for gradual progress.		Finalize delivery details.
Alejandro Torres	30/04/21			
Mateo Muñoz	1/05/21	We finalize delivery details.		DONE.
Alejandro Torres	1/05/21			

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