Estructuras datos y algoritmos 1.

LABORATORY 4.

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3.1

The data structure used was Singly Linked list, we chose it since we noticed that it is the most direct way to find which bees are closest to the others to "report on" the collisions, and its complexity for the worst case is O (n).

3.4

Inserting elements into the tree has a complexity O (log n). So, adding n elements to the tree has a complexity of O (n log n). With this in mind, traversing the elements of the tree in preOrder, inOrder and postOrder has O (n) complexity.

3.5

n in this case is the data found within the node that is only obtained when the tree is traversed so n is the total of all the nodes. therefore, its complexity is O (log n).

4

4.1

4.1.1   B

4.1.2   D

4.2   A

4.3

    A.   return false;

    B.   return suma == true

    C.   (a.izq, suma - a.data)

    D.   (a.der, suma - a.data)

4.9   A

4.13

    4.13.1   suma[raiz.id]

    4.13.2   A