Laboratory practice No. 4: Hash Table and Binary Tree

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3) Practice for final project defense presentation

3.1 The data estructure we choose is Octree. This structure divides the data in eight different regions and with this It makes a faster analisis than other structures. Its time of complexity in worst case is O(logn), compare to the O(n^2) from other data structures
3.4/3.5.
Time complexity for the worst case:

O(n + m) where n is the number of nodes and m the number of rows

4) Practice for midterms

4.1 .
    4.1.1. B.
    4.1.2. D.
4.2
    4.2.1. Lowest common ancestor between nodes n1 and n2.
    4.2.2. T(n) = 2T(n/2) + c or O(n).
    4.2.3. Use a conditional.
4.3
    4.3.1. return True.
    4.3.2. O(n)
4.4 3
    4.4.1. C.
    4.4.2. A.
    4.4.3. D.
    4.4.4. A.
4.5
    4.5.1 toInsert == p.data
    4.5.2 toInsert > p.data

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