Home Work 3.
Algorithms and Data Structures

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HW3.1 CLR 12.4-2. Write pseudo-code for operations Delete(k,T). Insert(T,k), Search(T,k) in hash table with open hashing taking into account that a slot can hold a key, a flag NIL or flag DELETED

HW3.2 Write pseudo-code for the operation Predecessor(x) when x is a node in a binary search tree T.

HW3.3 Write pseudo-code for key-successor(k), key-predecessor(k) where k is a key not necessarily in T. Use previous codes as subroutine.

HW3.4 CLR 13.3-6. For any binary tree T and any nodes x and y in T if we call Tree-delete(T,x) and afterwards Tree-delete(T,y) do we get the same final tree as by calling Tree-delete(T,y) and then Tree-delete(T,x)? Argue why this is true or give a counter example.