Assignment 2.

1) Design a tree data structure with operations such as: inserting an element, deleting an element, finding the depth of the tree, finding the number of nodes at each level, finding the total number of nodes, traversing the tree (in order, pre-order, post-order).

2) Create a BST data structure, with all operations mentioned above for a tree.

3) Design a AVL tree, with all valid operations above.
4) Design a tree for a given infix expression. Perform the conversion to pre and postfix expressions using the traversal.
5) Define a hash function with a linear probing strategy. Handle collisions using a list at each node.