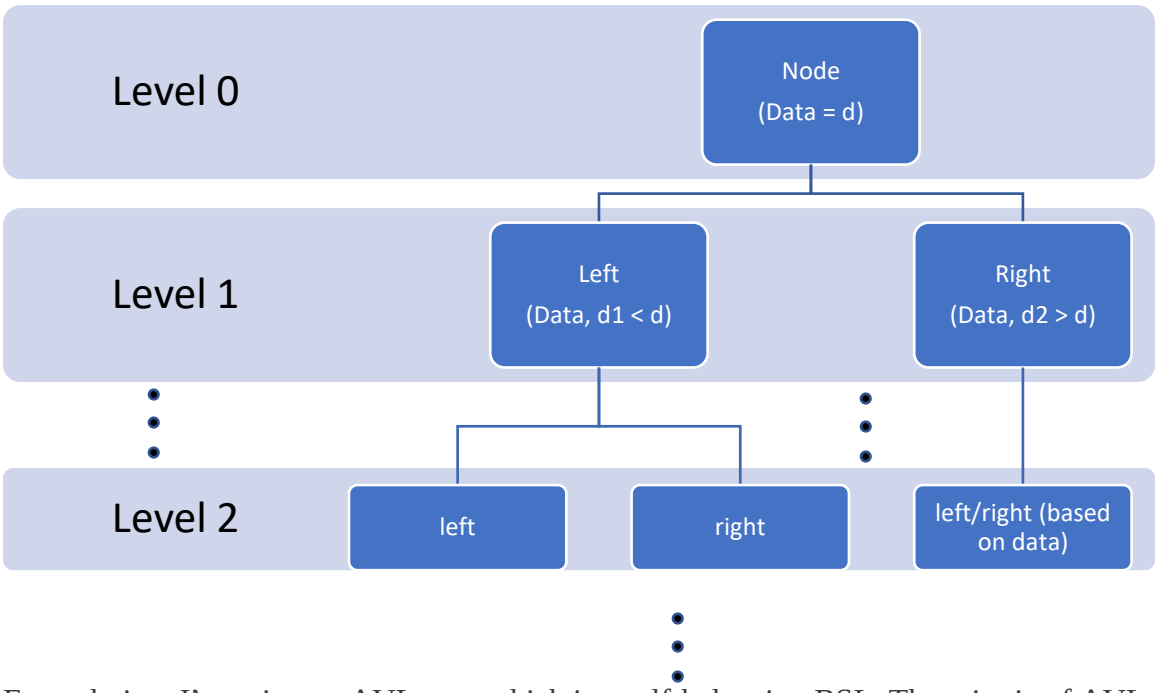
Task 1

In order to keep the tree balanced I'm using BST(Binary search tree).

The strategy used is data in the left of any node is less than the data in the node, and data in the right of the node is more than the data in the node



For ordering, I'm using an AVL tree, which is a self-balancing BSL. The criteria of AVL balancing of tree is the difference between the heights of subtree branches shouldn't be more than unity.

The submitted folder contains below files:
Avltree.c which contains the functions used
Avltree.h is the header file
Serial.c is the main file for running the avl tree

Task 2

Additional file added:
Parallel.c

I'm creating 3 pthreads, one for each – creating& insertion od data in the node, deletion of node & yet another for balancing of node in the ALV tree structure.

For data display, I'm using DFS (Depth First Search), which goes to the left most depth, and the moves right-wards.