

Binary Search Trees

BST Definition

Consider an arbitrary node in a tree called A.

All values in the left subtree are less than the value in A.

All values in the right subtree are greater than the value in A.

Create BST

Create a BST for the following strings:

jan, feb, mar, apr, may, jun, jul, aug, sep, oct
nov, dec

Traversals

If visiting a node means printing the contents of the node, show each of the following traversals of the newly created BST.

- preorder
- inorder
- postorder

BST Functions

- Write an algorithm for `bstInsert`.
- What is the computing complexity of your algorithm?
- Write the C function `bstInsert`.
- Write a C function `bstFindLevel` that returns the level of a node in a BST.
- Write a C function `btFindLevel` that returns the level of a node in a binary tree.