

Construct a binary tree from its inorder and preorder traversals sequences.

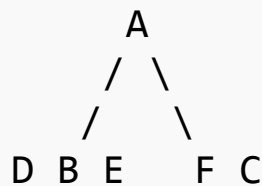
Given the *inorder* and *preorder* traversals of a given *binary tree* (not necessarily a Binary Search Tree), write a C++ program to reconstruct the tree structure.

Let us consider the below traversals:

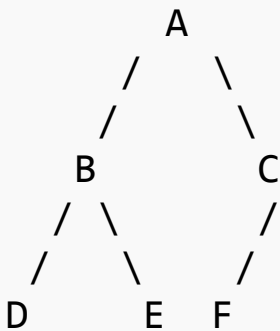
Inorder sequence : D B E A F C

Preorder sequence : A B D E C F

In a Preorder sequence, leftmost element is the root of the tree. So we know 'A' is root for given sequences. By searching 'A' in Inorder sequence, we can find out all elements on left side of 'A' are in left subtree and elements on right are in right subtree. So we know below structure now.



We recursively follow above steps and get the following tree.



The program should be able to print the tree in xdot format.