

Lab Assignment 8 : Node Insertion in AVL Trees

Input: You will be given English words (all capital letters): one word per line.

Procedure: Please refer "Lecture 18" on Nalanda.

Read the English words one by one and insert them in sequence in an AVL Tree. Use dictionary order for insertion in AVL Tree.

Output: First print in order traversal of the final AVL Tree: On each line print the word, then blank space, then height of the node, then balance factor of the node.

Finally print preorder traversal of the final AVL Tree: On each line print the word, then blank space, then height of the node, then balance factor of the node.

Sample Input : Sample Output :

MAR
MAY
NOV
AUG
APR
JAN
DEC
JUL
FEB
JUN
OCT
SEP

APR 1 0
AUG 2 1
DEC 3 1
FEB 1 0
JAN 5 -1
JUL 2 -1
JUN 1 0
MAR 4 -1
MAY 1 0
NOV 3 -1
OCT 2 -1
SEP 1 0

JAN 5 -1
DEC 3 1
AUG 2 1
APR 1 0
FEB 1 0
MAR 4 -1
JUL 2 -1
JUN 1 0
NOV 3 -1
MAY 1 0
OCT 2 -1
SEP 1 0