

Due: 11:05 on 11/22/2011

(20 points) Download the template **bonusXXX.asm** for your assignment from D2L. Write an external file **btree.asm** that will contain the three recursive traversal methods. Then, write the code to reference three traversal methods in the appropriate place in the template. I would recommend that you test them as you do each one to ensure that one function works before you move on to another.

Within the traversal methods file, you must use the structure definition of a node and reference the members of the node using the structure notation.

You must also use **putstring** as an external method and make use of the **puts** macro to display the "value" of a node.

Deliverables

Submit this cover sheet, hardcopy of your driver, **bonusXXX.asm**, a hardcopy **btree.asm**, and a screenshot of the execution at your exam on Tuesday. Drop a zipped folder containing ALL files used (except **kernel32.lib**). I will have my own driver with a built-in tree test your methods.

```
void inorder (node* N)                                ;node* N represents the address of a node
{
    if ( N != null)                                   ;null is binary 0
    {
        inorder (N-> left);                           ;represents the address in the left part
        //display N ->value;                             ;display the value of the node
        inorder (N ->right);                           ;represents the address in the right part
    }
} //end of inorder

void postorder (node* N)
{
    if (N!=null)
    {
        postorder (N->left);
        postorder (N->right);
        //display N-> value;
    }
} //end of postorder

void preorder (node* N)
{
    if (N!=null)
    {
        //display N-> value;
        preorder (N->left);
        preorder (N->right);
    }
} //end of preorder
```

(OVER)

The results of execution of your program should look something like the below:

Name: *your name goes here*

Date: 11/22/2011

The results of the inorder traversal

Bonnie Candace Daniel Edward Fred Karl Linda Mandy Peter Timmy Victor

The results of the preorder traversal

Mandy Fred Daniel Bonnie Candace Edward Karl Linda Timmy Peter Victor

The results of the postorder traversal

Candace Bonnie Edward Daniel Linda Karl Fred Peter Victor Timmy Mandy