CS 2420  
Binary Search Trees

# Purpose to familiarize you with Binary Search Trees

# Tasks

* Create a Binary Search Tree Class (don’t allow duplicates)
  + Member variables
    - root
  + Constructor
  + Destructor
  + Size( ): Returns the number of elements in the tree
  + Print( ): Do the indented print that was discussed in class
    - Pre order traversal
    - Print one element per line
    - Indent according to the depth
      * See page 505
  + Erase(int item): Erase the occurrence of the item in the tree (there should be 1 or 0 occurrences).
    - Resulting tree should still be a BST
  + Insert(int item): Insert the item into the BST. Don’t allow duplicate numbers.
  + Traversals (just print out the items, don’t worry about passing functions as parameters)
    - Pre-Order
    - In-Order
    - Post-Order
* Create a Driver
  + Create an **interactive** driver similar to the ones used in the sequence projects
    - Feel free to start with one of those and adapt it to this.
  + Test all public functions

# Turn in

* Code (.h and .cpp files)
* Windows executable