

Create a project called lab6 (if using Visual Studio). Download the source file called lab6.cpp from Blackboard, and use it as the starting point for your assignment.

Your group will complete the implementation of the template class called BSTNode, which implements a Binary Search Tree for any base type that defines the < operator and the == operator. The member functions that your group will complete are:

- void BSTNode<T>::insert(const T& data);
- void BSTNode<T>::preOrderDisplay();
- void BSTNode<T>::postOrderDisplay();

Follow the instructions contained in the comments in lab6.cpp to get started.

When you're done, the output of supplied driver program (using BSTNode<T>::inOrderDisplay() in operator<<) should look like this:

```
iroot == 10, 20, 100, 200, 300
sroot == Friday, Monday, Saturday, Sunday, Thursday, Tuesday,
Wednesday
```

When you substitute preOrderDisplay() in operator<<, the output should look like this:

```
iroot == 100, 10, 20, 200, 300
sroot == Sunday, Monday, Friday, Saturday, Tuesday, Thursday,
Wednesday
```

When you substitute postOrderDisplay() in operator<<, the output should look like this:

```
iroot == 20, 10, 300, 200, 100
sroot == Friday, Saturday, Monday, Thursday, Wednesday, Tuesday,
Sunday
```

Be prepared to demonstrate the result of any one (or all three) of the above display methods at the lab TA's request (by changing the definition of operator<< as needed).

When finished, one member of your group should turn in your completed lab6.cpp file on Blackboard.