

CS415 Project 2

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Project Description

Create a pointer based binary search tree in C++. Create a method to print the binary search tree in a pre-order fashion.

Course Details

- **Course** - CS415: Principles of Programming Languages
- **Instructor** - Daniel Nash

Project Goals

- Create a node structure.
- Create a binary search tree class of nodes.
- Create helper methods to print tree contents in a pre-order fashion.

Running project

Create a local copy of this project by running the following command:

```
git clone git@github.com:KyleAure/WSURochester.git
```

Then navigate to this project directory:

```
cd WSURochester/CS415/Project2/src
```

Then run the following goals to build and run this program:

```
g++ main.cpp -o app  
./app
```

Documentation

Output

Output from running the program can be found below:

```
[wu7472qj@wu7472qjm8 src (WSURochester) (CS415-Project2) ✨ g++ main.cpp -o app
main.cpp:195:24: warning: range-based for loop is a C++11 extension [-Wc++11-extensions]
    for(const int &val : vals) {
                        ^
main.cpp:206:24: warning: range-based for loop is a C++11 extension [-Wc++11-extensions]
    for(const int &val : vals) {
                        ^
2 warnings generated.
[wu7472qj@wu7472qjm8 src (WSURochester) (CS415-Project2) ✨ ./app
In Order Print: -10 -1 1 6 11 100
Post Order Print: 11 1 -1 -10 6 100
Node count: 6
Height: 4
Max path: 11 1 -1 -10
11 removed: In Order Print: -10 -1 1 6 100
1 removed: In Order Print: -10 -1 6 100
6 removed: In Order Print: -10 -1 100
-1 removed: In Order Print: -10 100
-10 removed: In Order Print: 100
100 removed: In Order Print:
wu7472qj@wu7472qjm8 src (WSURochester) (CS415-Project2) ✨
```