

## Assignment #5

Original Due: 3:00 PM, Monday, April 19

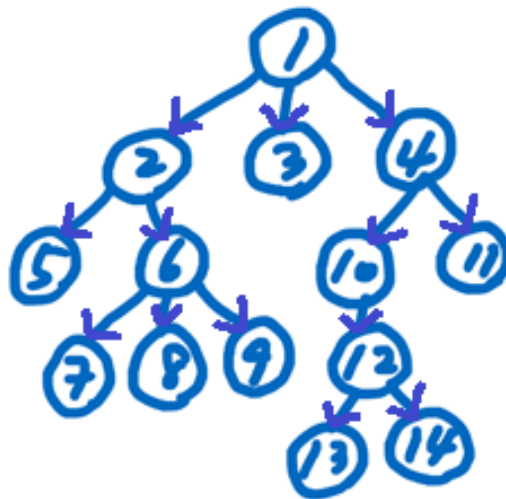
Extended: 3:00 PM, Monday, April 26

You must complete this assignment by yourself. You cannot work with anyone else in the class or with someone outside of the class. You are not allowed to copy solutions from the world wide web. The code you write must be your own.

### Provided File:

- A5.java - A shell file.

**Description:** Encode a tree data structure instance below and implement the post-order tree traversal algorithm.



You must use the shell file for this assignment. You are not allowed to remove or change any existing code in the shell file. The shell file contains two placeholders (below) that indicate where you have to fill in your code.

```
//-----  
//  
// FILL IN HERE  
//  
  
//  
//-----
```

Below is the required output for the tree instance shown above:

5 7 8 9 6 2 3 13 14 12 10 11 4 1

**Submission:** your A5.java file

**General Programming Assignment Requirements:**

- Classes must be in the default (**no package statement**) unless otherwise specified. You will lose 20 points (all points) if you put a package statement in your program.
- If your program that does not compile or does not run, you will lose all points.
- If you submit the wrong file your grade will suffer accordingly. Most likely a 0.
- You must fill in the header for every file you submit or you may lose points.

**Checklist:** Did you remember to:

- worked on the programming assignment by yourself?
- fill in the header in your file **A5.java**?
- ensure your program does not suffer from a compile error or runtime error?
- ensure your program creates the correct output and that it matches the expected output exactly?
- properly indent your source code so that your indenting is readable and consistent?
- use good names for variables to make your program easy to understand?
- turn in your Java source code in a file named **A5.java** through D2L?