Assignment Set 8 (Uploaded on September xx, 2014)
Clarification deadline date: October 21, 2014
Submission deadline date: October 23, 2014

Problem 1 [AVL tree]: Write C code for the following
problem:

Write code for the following problems on AVL tree:

Given a set S of real numbers (there can be repetition)
(a) create an AVL tree;
(b) insert an element into the AVL tree;
(c) delete an element from the AVL tree;
(d) implement binary search on the AVL tree;
(e) given an element x, find the predecessor and successor
of x
from the AVL tree;

[Marks: 50 (a) + 80{(b) to (e); 20x4} + 20 {Good
programming habits} = 150]

Naming conventions for program files. xx is your roll
number:

For Problem 1:
The name of the src file for problem 1 of assignment 8
should be
``cs14xx-assign8-src-prog1.c''.

The name of the app file for problem 1 of assignment 8
should be
``cs14xx-assign8-prog1.c''.

The name of the include file for problem 1 of assignment 8
should be
``cs14xx-assign8-prog1.h''.

At the top of each of your program files, add the
following. If you are
writing multi-file programs, then each file should have
it.

```
/*-------------------------------------------------------
----------
Name:
Roll Number:
Date of Submission:
Deadline date:
Program description:
Acknowledgements:
--------------------------------------------------------
----------*/
```