

Lab 7

Turn In:

1. Coding Assignment – Due Txxxx, xxxx xx, 2014
 - a) For each exercise, a hardcopy package must be generated to include the following items:
 - Cover Sheet (see the sample copy include in lecture note)
 - Exercise/problem statement
 - Copy of program (named as **cis27Spring2014YourNameLab7Ex1**)
 - Copy of output (copy and paste from output screen as possible)
 - b) Submitting in class one hard copy package for each exercise; and
 - c) Emailing your work as follows,
 - One message for each exercise.
 - Attaching the source file (program) that was created in part (a).
 - The SUBJECT line of the message should have one of the following lines:
CIS 27 Spring 2014 Your Name : Lab 7 - Exercise #1
Or,
cis27Spring2014YourNameLab7Ex1
2. Q.E.D.

Problem #1**Part A**

- 1) Provide a non-recursive algorithm to find the smallest node in a BST of **Fraction** objects.
- 2) Write a non-recursive function `getSmallestFractionBSTYourName()` to find the smallest node in a BST of **Fraction** objects.

Part B

Create a menu program to test the above functions. The menu should at least have the following options:

- (1) Insert a (**Fraction**) node to a BST; no duplicate allowed
- (2) Display
- (3) Search for a given (**Fraction**) node
- (4) Remove a node
- (5) Get & display the smallest node
- (6) Quit

All of the above functions should be non-recursively implemented and named as follows:

```
insertFractionBSTYourName( )
displayFractionInorderBSTYourName( )
displayFractionPreorderBSTYourName( )
displayFractionPostorderBSTYourName( )
searchFractionBSTYourName( )
removeFractionBSTYourname( )
getSmallestFractionBSTYourName( )
```

Name your program as `cis27Spring2014YourNameLab7Ex1.c` and test your program with the following tree,

