Lab 9

Week of 3/1

Announcements

- No lab will be assigned during week 10 (next week)
  - Lab 9 due next week like usual
- I plan to treat the lab time of week 10 as extended office hours (you can demo to me during lab time of week 10)

Partnering Up

- Each partner does the **same** provided lab for the week
  - **Not** working together, both partners need to **individually** complete and demo the lab
- Still need to write test cases and report for partner like normal
- Don’t forget to turn in the correct files
  - Test file that you personally wrote
  - Report that you personally wrote
  - Do **not** need to turn in files that your partner wrote

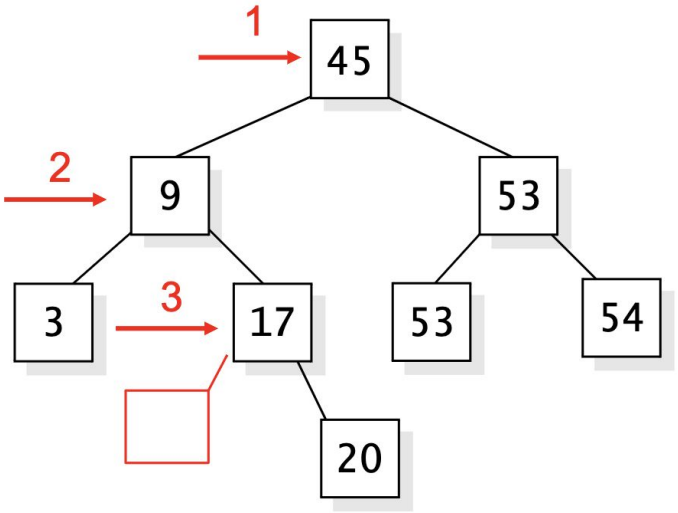
Binary Tree Node

- Node for a binary tree
- Functions for manipulating a BST
- Private variables:
  - Item data_field; //data field of a node
  - binary_tree_node *left_field; //pointer to the left sub-tree
  - binary_tree_node *right_field; //pointer to the right sub-tree
- Write this class first before going to Bag
- **Look to lecture slides for guidance**

Assume we are looking for number 16

Bag

- A container template class for a collection of items
  - Stores these items in a BST
- Private variables:
  - binary_tree_node<Item> *root_ptr; //root pointer of BST
- Write this after completing binary tree node
- **Look at lecture slides for guidance**



Provided Files

- Binary Tree Node
  - bintree.h
    - Will implement your binary tree node in this file
- Bag
  - bag_bst.h
    - Will implement your BST in this file
- Testing
  - bagtest.cpp
    - Interactive, command based, tests
  - bagexam.cpp
    - Grade correctness of bag class
- No need to create any other files

Compile/Demo

- Test
  - g++ bagtest.cpp
  - ./a.out
- Exam
  - g++ bagexam.cpp
  - ./a.out
- Will be running through some test commands for demo

Don’t forget

- Demo code to me
  - Either today or during week 10
  - **Must compile and run on linux servers**
- Submit code to camino by the end of next lab (week 10)
- Comment code
  - Loops and conditionals
- File with description of lab is on Camino
- Check google sheet to make sure that I didn’t forget to check you off for a demo