



Lab 9



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

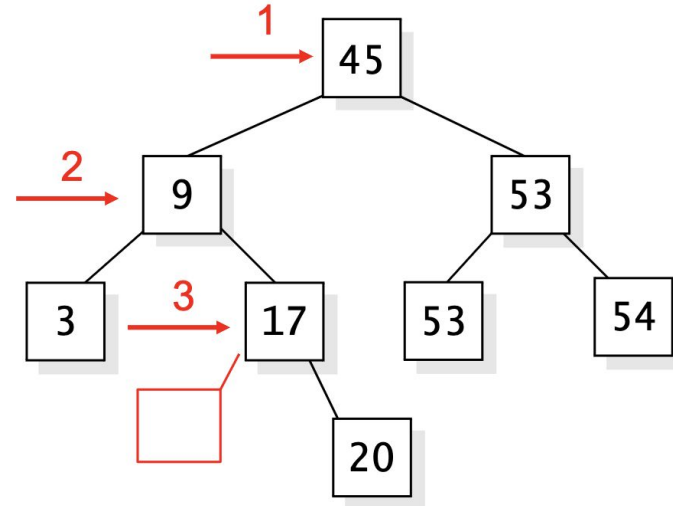
Binary Tree Node

- 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