CS2100

Search trees

Recap

- Lab due today
- HW (written) due Monday
- Next HW: remove in a BST
  due Tuesday after Easter

Last time:

BinaryTree.h

- generic operations (use them on next HW!)

What's left:

Housekeeping!

- recursivelyDelete
- copy (?)

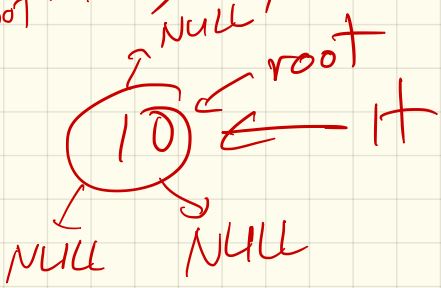
preorder

postorder

Today: Search trees

Insert: 10, 6, 11, 20, 2, 15, 9

insertAsRoot




```
if val <= *it
    if(!it.hasLeftChild())
        insertAsLeftChild(it, val);
    else
        it = it.left()
else
    if (!it.hasRightChild())
        insertAsRightChild(it, val);
    else
        it = it.right()
```

For remove:

3 case:

- be a leaf
- have 1 child
  (promote left or right)
- have 2 children

→ could be root or not