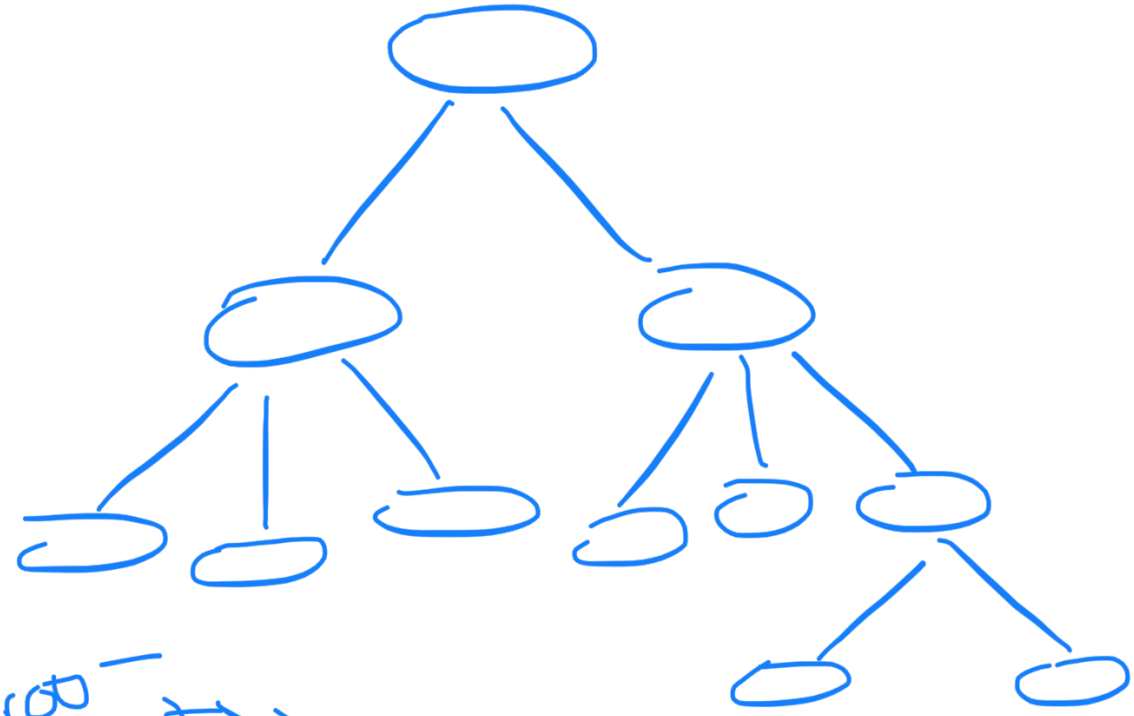
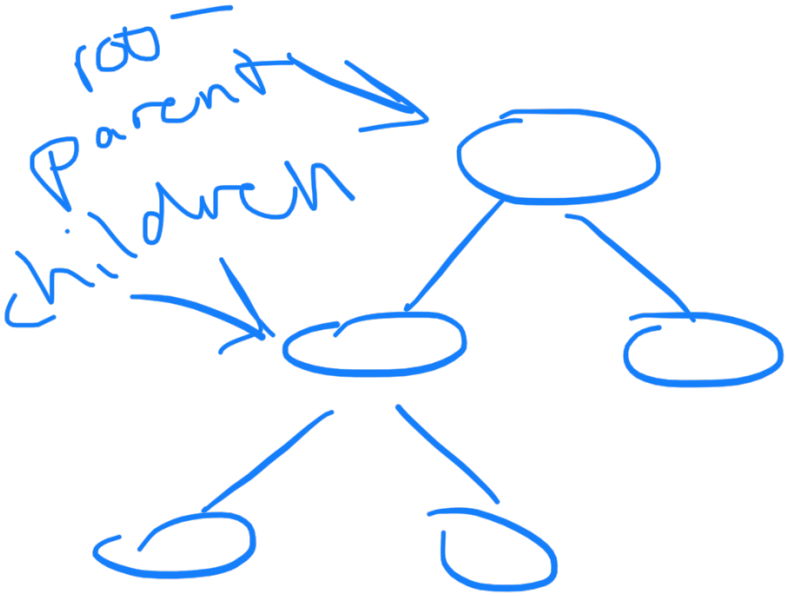
CS32 Week 9





In-order
4 2 5 1 6 3

Pre-order
1 2 4 5 3 6

Postorder

4 5 2 6 3 1

level order

1 2 3 4 5 6 queue

a left child

b right child

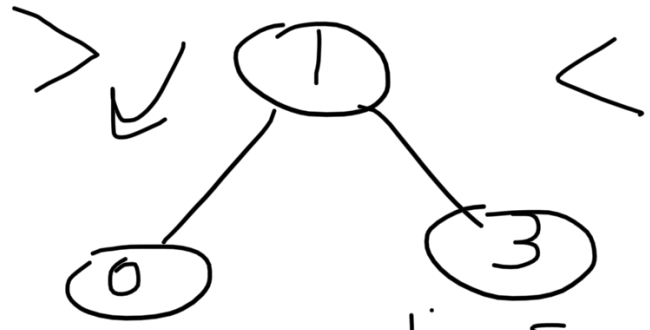
c current

in a c b

pre a c b

post a b c

O(log n) for BST's



primary operations

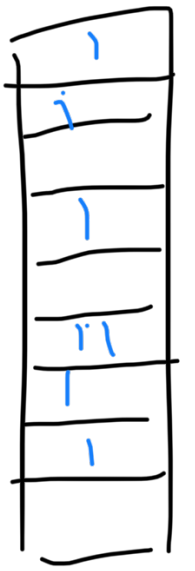
search

insert

delete

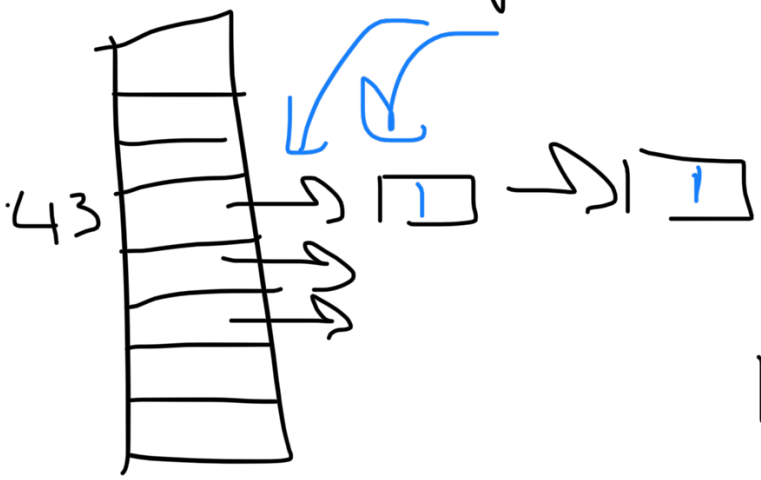
Hash Tables

O(1) on average



hash( ) → index

open-hashtable



hash(item) → index → linked list traversal

std::hash()

<string>

int?

O => unsigned long?

size_t

O ⟶ BIG#

hash a % NUM_BUCKETS

#include <functional>